

ADVICE TO • •
CONSUMPTIVES

• • • • •
NOEL D. BARDSWELL •

ADVERTISEMENTS

NEW BOOK. Crown 8vo. Cloth, 2/6 net.

Fully Illustrated with Photographic Reproductions and Plans for the Construction of a suitable Open-Air Shelter for Garden use at Home.

OPEN-AIR AT HOME: Practical Experience of the Continuation of Sanatorium Treatment

By STANLEY H. BATES

With
"1
comme
who co
he mar
three y
be obe
"2
person:
should
Jour.
"3
open-a

I.D.
e his
and
rials
d for
must
ter's
Med.
uing

The University Library
Leeds



TH

T

By

nd.

Has
Col

is
nd

Medical and Dental
Library

By
become
"4
in regu
"5
duct o:
provide
forth in
"6
which l
to every one who has the care of such patients in their own homes."—West Lond. Med. Jour.

and
tient
con-
isely
s set
uide
nd it

BRISTOL: JOHN WRIGHT & SONS LTD.

LONDON: SIMPKIN, MARSHALL, HAMILTON, KENT & CO. LTD.

ORE
F 300
BAP



THE

30106

004188271

MAN

?

By NOEL DEAN BARDSWELL, M.D.

The Scientific Press Ltd. London.

Re-issue 1/6

"Those interested in the common sense treatment of consumption will find this volume a convenient handbook, both for themselves and for any whom they may wish to instruct."—THE HOSPITAL.

PLEA FOR A SIMPLER LIFE

FADS OF AN OLD PHYSICIAN

By GEORGE S. KEITH, M.D., LL.D., F.R.C.P.E.

CROWN 8VO.

Price 6d. each

PAPER COVERS.

SOME PRESS OPINIONS.

"His opinions may be read with advantage."—*The Times*.

"There is no doubt whatever that the book is full of wise counsel."—*Edinburgh Medical Journal*.

"There is much truth, and earnestly expressed, in the pages of this small volume, and we sincerely hope that it may receive the attention which it assuredly deserves from the medical practitioners of the present generation—and that the publication may bear fruit towards the reformation of some few, at least, of the many flagrant abuses of medical teaching and practice."—*Dublin Journal of Medical Science*.

"There are few works containing more sound common sense and good practical wisdom put into small compass as in the little book bearing the above title (*Plea for a Simpler Life*). It is worth its weight in gold to the man who would rather go in for prevention than cure."—*The Liberal*.

"Some very excellent hints of the best methods for the cultivation of a sound mind in a sound body are to be gleaned, by the layman even, from Dr. Keith's little treatise, *The Fads of an Old Physician*. The booklet forms a sequel to the author's *Plea for a Simpler Life*, which was received with well-deserved recognition by medical and lay authorities. Would that all fads had as much solid worth as those of an Old Physician."—*Pall Mall Gazette*.

BY THE SAME AUTHOR.

On Sanitary and Other Matters. Crown 8vo, cloth, price 2/6.

On Waste of Water. Crown 8vo, paper covers, price 6d.

PUBLISHED BY

ADAM & CHARLES BLACK, 4 SOHO SQUARE, LONDON

ADVERTISEMENTS

The oft-recurring question,
"WHAT'S WRONG?"

will be more easily answered in future
if this volume is by one's side.

BLACK'S MEDICAL DICTIONARY

By JOHN D. COMRIE, M.A., B.Sc., M.B., F.R.C.P.E.

Fourth Edition, large crown 8vo, cloth, containing 6 full-page Illustrations in colour and 384 illustrations in black and white in the text.

Price 7/6 net. By post, price 8/-.

SOME PRESS OPINIONS

"No one could read it through without acquiring a large amount of sound information, not only in regard to the organs of the human body, their functions, and the diseases to which they are liable, but also a good deal of learning in regard to such important matters as clothing, diet, exercise, sanitation, and ventilation. It is a thoroughly practical, useful book, singularly complete."—*Scotsman*.

"Affords information upon all important medical subjects in a form which places it well within the comprehension of those who lack special training and scientific knowledge. . . The skill and judgment with which the *Dictionary* is compiled, and the excellence of its contents, cannot fail to be widely appreciated."—*World*.

"We commend the book with every confidence. Besides hosts of interesting facts about medical subjects, it contains practical advice in clear terse terms concerning first-aid treatment for bleedings, broken bones, poisoning and the like. Admirable drawings give point to the written directions for bandaging and other treatment. A long article on Consumption contains a detailed account of the fresh-air method of dealing with the disease. Indeed, only a confirmed grumbler could utter anything but praise of this neat, comprehensive, business-like book."—*Dublin Express*.

"Medical terms are arranged and explained in alphabetical order, and the details given are so practical and clearly put that it is a book we would strongly recommend to nurses. By having this book in the house the nurse need not be obliged to write to busy journals on simple medical matters, but in addition to finding the answer to occasional queries, we can confidently say that nurses will find this an admirable text-book for occasional study. . . This book is the best seven-and-sixpence worth for a nurse that we have seen for some time past."—*Nursing Times*.

OBTAINABLE THROUGH ANY BOOKSELLER.

*Prospectus, containing specimen pages, on application to
the Publishers,*


ADAM & CHARLES BLACK, 4 SOHO SQ., LONDON, W.

SCHOOL OF MEDICINE.

UNIVERSITY OF LEEDS.

D535

**ADVICE TO
CONSUMPTIVES**



Digitized by the Internet Archive
in 2015

<https://archive.org/details/b21517319>

SCHOOL OF MEDICINE
UNIVERSITY OF LEEDS.

ADVICE TO CONSUMPTIVES

HOME TREATMENT, AFTER-CARE
AND PREVENTION

BY

NOEL DEAN BARDSWELL, M.D.

MEDICAL SUPERINTENDENT, KING EDWARD VII. SANATORIUM

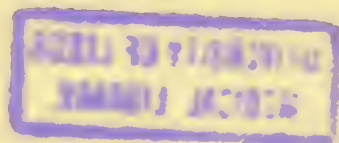
FOREWORD

BY

C. THEODORE WILLIAMS,

M.V.O., M.D., F.R.C.P.

CONSULTING PHYSICIAN, BROMPTON HOSPITAL FOR CONSUMPTION
AND THE KING EDWARD VII. SANATORIUM



LONDON

ADAM AND CHARLES BLACK

1910



Printed by BALLANTYNE & CO. LIMITED
Tavistock Street, Covent Garden, London

053533

FOREWORD

THE after-care of the consumptive on leaving the sanatorium is of the highest importance ; for on this his future health and prosperity may depend.

The sanatorium, with its treatment, hygiene, and discipline, has accomplished much, and has probably raised him to a higher standard of health ; in fact, has made a new man of him. It now remains for him to consolidate that improvement and to maintain that standard, and even to raise its level. In order to do this, he must carry out, as far as possible, the mode of life pursued in the sanatorium ; with certain modifications which his own occupation and his relation to others render necessary.

If he neglects to do so, and returns to those habits of life which promoted, if they did not cause, the development of his disease, he will probably suffer a relapse and require a fresh term of sanatorium treatment. He should bear in mind, too,

that relapses are more difficult to recover from than are original attacks; and, after such, the amount of lung surface involved is generally greater, and that of healthy lung available less. Therefore, on all accounts it is advisable to prevent relapses, which may ruin the prospects of the consumptive.

Open-air occupations are best, but when they are not possible it is always feasible to combine with indoor occupations a hygienic life, including a good supply of fresh air. The present work by Dr. Bardswell is sensible, concise, and highly practical; it is likely to prove of the greatest assistance to patients leaving the sanatorium.

Dr. Bardswell has had an extensive sanatorium experience, and has written ably on dietetics and other subjects connected with sanatorium treatment. He knows well the difficulties of consumptive patients, and suggests in the present work the best means of coping with them. His careful and sound advice will be welcomed by many.

A very encouraging feature in the modern treatment of consumption is the great interest which has been aroused among the public, and the readiness with which the various classes of society conform to the regulations laid down by the medical profession. We hope this will continue, and that in time we

may enrol many more as active workers in the crusade against tuberculosis.

Fifty years ago, though consumption was far more prevalent than it is now, and the mortality much higher, the interest taken by the public in that dread disease was principally confined to philanthropists like Guy, Southwood Smith, Edwin Chadwick, John Simon, and Philip Rose; and to the families who had been heavy losers by its onslaughts. It was a remarkable feature at the first great public meeting, held in London in May 1841, at which it was resolved to found the Brompton Hospital, that amongst those present there was said not to be one who had not lost some relative from consumption. The consumptive patient was then regarded by the public generally, and largely also by the profession, as a doomed being, for whom little prospect remained but the relief of suffering and the consolations of religion. That cases of consumption had recovered was well known; but these were considered the exceptions, and not, as now, the rule.

The steady progress of medical science in the last fifty years has shown that, given favourable conditions and a good stock of energy and perseverance, the consumptive patient, if the disease be not too

far advanced, has, in the majority of instances, a hopeful prospect, and may look forward to a period when he can return to a sphere of activity and usefulness.

C. THEODORE WILLIAMS

SCHOOL OF MEDICINE
UNIVERSITY OF LEEDS.

PREFACE

THIS book consists for the most part of a series of short lectures which I have given from time to time to the patients at King Edward VII. Sanatorium. For some years past I have made it a practice to keep a note of every question asked me by patients apropos of consumption and its treatment. The questions thus collected and classified have provided me with my syllabus.

Although written primarily with a view to helping the patients under my immediate care, it has been suggested to me that these hints to consumptives would be of some service in a wider field. It is with this hope that they have been printed.

My chief object has been to offer advice to those who have had the advantage of treatment in a sanatorium, and are desirous of knowing how to proceed when they again live at home. But the care the consumptive must exercise in his after-treatment and the precautions he must take provide an

object-lesson for all who would aim at preserving themselves from tuberculous infection. Many, from one reason or another, are especially liable to contract tuberculosis; no one, however healthy the stock from which he comes, is free from the risk. To adopt many of the simple precautions suggested in this book would be to minimise greatly the ever-present menace. Prevention is better than cure.

N. D. B.

CONTENTS

CHAPTER I CONSUMPTION

	PAGE
ITS NATURE	1
NATURAL METHOD OF ITS ARREST AND CURE	4
DIFFERENCE BETWEEN APPARENT CURE AND ABSOLUTE CURE	8
POSSIBILITY OF RELAPSE AFTER APPARENT CURE	9
HOW CAN ABSOLUTE CURE BE DETERMINED?	9
RATIONALE OF SANATORIUM TREATMENT	10

CHAPTER II FRESH AIR

WHERE TO LIVE	12
FRESH AIR WHEN AT WORK	14
FRESH AIR WHEN AT HOME	16
NIGHT AIR AND FOG	17
OPEN-AIR SHELTERS	20

	PAGE
THE BEDROOM	30
FRESH AIR AT THE WEEK-END	31
CHANGE OF AIR: HEALTH RESORTS	32
SEA VOYAGES	33

CHAPTER III

FOOD

AMOUNT OF FOOD NECESSARY	36
GAIN OF WEIGHT	37
EXAMPLE OF A SATISFACTORY DIET	38
HOW LONG SHOULD GENEROUS FEEDING BE MAINTAINED?	40
HINTS <i>re</i> BREAKFAST, LUNCHEON, AND DINNER	41
CHEAP MEALS: HINTS HOW TO BUY AND COOK	43
ALCOHOL	47

CHAPTER IV

REST, EXERCISE, AND RECREATION

GENERAL PRINCIPLES <i>re</i> REGULATING REST AND EXERCISE	48
VALUE OF REST	49
VALUE OF WALKING EXERCISE	50
CRICKET	51
BOATING AND BATHING	52
CYCLING	53
LAWN TENNIS	53
RIDING, FISHING, AND SHOOTING	53
WINTER SPORTS	54

CONTENTS

	xiii
	PAGE
GOLF	54
BOWLS, CROQUET, ETC.	55
GARDENING, ETC.	55
MOTORING	55
BREATHING EXERCISES	55
MUSCULAR EXERCISES AND DEVELOPERS	56
SMOKING	56
MUSIC, SINGING, ETC.	57
BILLIARDS	57
DANCES, THEATRES, ETC.	57

CHAPTER V

HINTS *RE* VARIOUS FACTORS IN SANATORIUM TREATMENT

CLOTHING	58
BATHS	60
CARE OF TEETH	60
PERIODIC MEDICAL EXAMINATIONS	62
PERIODIC WEIGHING	63
TEMPERATURE-TAKING: VALUE OF, AND DAN- GERS OF	63
TEMPERATURE AS A GUIDE IN AFTER-CARE	65
A TYPICAL SANATORIUM DAILY ROUTINE	66
HOW TO KNOW IF CURE IS PROGRESSING WELL	67
DANGER SIGNALS	68
DIGESTIVE BREAKDOWNS: TREATMENT OF	69
BLOOD IN SPUTUM: HÆMOPTYSIS: TREATMENT OF	70

	PAGE
DANGER OF INFLUENZA, AND OTHER ACUTE ILLNESSES	71
INVALID DIETS FOR CONSUMPTIVES	72

CHAPTER VI OCCUPATION

VALUE OF OUTDOOR OCCUPATION	77
<i>Re</i> CHANGE OF INDOOR FOR OUTDOOR OCCUPA- TION : POSSIBILITIES AND DIFFICULTIES	78
FARMING : GARDENING : POULTRY-REARING, ETC.	79
INDOOR WORK COMPATIBLE WITH GOOD HEALTH	86
<i>Re</i> LENGTH OF TREATMENT NECESSARY TO RESTORE CAPACITY FOR WORK	87

CHAPTER VII EMIGRATION FOR CONSUMPTIVES

REPORTS FROM FORMER PATIENTS *re* PROSPECTS

IN—	
CANADA : BRITISH COLUMBIA	92
ALBERTA	95
NORTH-WEST	96
AMERICA : CALIFORNIA	100
SOUTH AMERICA : BUENOS AIRES	103
SOUTH AFRICA : ORANGE RIVER COLONY	106
NATAL	113, 118
TRANSVAAL	116
NEW ZEALAND	120
AUSTRALIA	124

CONTENTS

XV
PAGE

CHAPTER VIII

INFECTION, DISINFECTION, ETC.

DISPOSAL OF SPUTUM	131
SPUTUM FLASKS, ETC. : CLEANING OF	132
TABLE NAPKINS	133
CLEANING OF CUTLERY AND CROCKERY	134
FURNISHING OF ROOMS	134
CLEANING AND DISINFECTION OF ROOMS	135
RISKS OF INFECTION	136
HOW TO AVOID INFECTION	137
CONCLUSION	140
INDEX	141



ADVICE TO CONSUMPTIVES

CHAPTER I

CONSUMPTION: ITS NATURE, ETC.

WHAT is consumption? To put it in the simplest words, it is a disease of the lungs produced by the presence and action within them of germs termed tubercle bacilli. These bacilli, when active, bring about a gradual destruction of the lung tissue, and in this process produce poisons, which, entering the circulation, give rise to fever and other symptoms characteristic of the disease.

The obvious remedy, once it has been determined that bacilli have effected a lodgment, would seem to be the complete removal of the area of the lung containing them. Cure would then be attained at the sacrifice of a certain amount of lung tissue. In the case of accessible parts of the body, such removal of areas of tuberculous disease is commonly and successfully carried out every day; complete cure

of the diseased region being the result. For example, tuberculosis of bone, joints, glands, &c., is very frequently dealt with in this way. This direct method of attacking the disease is clearly most satisfactory, being at once the most expeditious and likely of success. In the case of tuberculosis of the lung, unfortunately, this direct method of attack is not possible; the anatomical and physical conditions of these organs do not allow of it. To attempt to remove tuberculosis from the lung of a consumptive by an operation would spell disaster. There remains the indirect method of attack. All living things require certain environment if they are to flourish; some plants, for instance, require a particular soil for their proper growth; to others the same soil would be death. It is similar with the tubercle bacillus. The human soil may or may not be suitable for its growth. Many people are not readily infected by tuberculosis; the germs may gain entrance but are destroyed before they obtain any footing. Such people are said to have a good resistance, or high degree of immunity. Other individuals again, with a tendency to it, either inherited or acquired through unhealthy conditions, are very prone to become infected. They are pre-disposed to consumption; their soil is suitable for

the growth of the bacillus. It does not come within the scope of this brief work to attempt a description of the scientific explanation of this question of resistance and lack of resistance; I have, however, touched on it in a later chapter when speaking of the infectivity of consumption, and how to avoid infection. It is sufficient for my present purpose if the reader appreciates the fact that the human body can by a variety of conditions be rendered readily liable to infection by tuberculosis, and happily can also be made highly resistant to this particular form of disease. It is on this fact that the principles of the sanatorium treatment are based. If the general health of the consumptive can be raised to a high pitch and maintained there, he gradually ceases to be a favourable soil for the life of the bacilli. His power of resistance, temporarily lost, has been regained. This point reached, it should be but a matter of time and continued raised resistance, not only to arrest the further progress of the disease, but ultimately to eradicate the bacilli from the areas they have invaded. It is the patient himself who must accomplish his cure in this way.

How long does it take to eradicate tubercle bacilli from a diseased lung? New arrivals at a sanatorium almost invariably ask the question, "How long must

I stay?" and "How long will it take to cure me?" It is impossible to answer these questions with any degree of certainty. An approximate statement—and this subject to many reservations and conditions—is all that can be given. Why is this so? In the process of the gradual arrest and cure of tuberculous disease in the lungs, the injured structures are converted into fibrous or scar tissue, just as occurs in any other part of the body, when repair follows damage. In many cases this scar tissue envelops areas of diseased lung. These scars and the areas which they usually enclose may contain tubercle bacilli for very long periods, and for long after the patient is seemingly quite restored to health. Herein lies the difficulty. After a period of some four to six months' successful treatment in a sanatorium, the patient finds himself feeling better than he has done for years, without a symptom of the disease; able to walk some ten to twenty miles daily without the least fatigue, and probably also quite free from expectoration. His relations and friends persuade him and themselves that he is indeed cured. For all that, this patient's scarred lung still contains the bacilli, and it only remains for his general health to deteriorate seriously for the bacilli to become active again, and for the symptoms of the disease to return. It is this which

every consumptive should appreciate, for it is to ignorance of this fact that relapse after apparent recovery and the consequent disappointment are frequently due. If the bacilli could be more rapidly and certainly destroyed within the lung, the cure of consumption would be, comparatively speaking, an easy matter; and the after-care of the consumptive, after discharge from the sanatorium, would not be the matter of extreme moment that it is. The position of the majority of consumptives when they leave a sanatorium, convalescent or apparently well, is not unlike the hypothetical case of a healthy individual who has swallowed and retains in his body a capsule containing a dangerous poison. To all appearances and for all practical purposes he is a perfectly healthy man so long as the capsule remains intact, but should it break and the contents be liberated, he would be in imminent danger of serious illness and perhaps death. His immunity from disaster would depend upon the integrity of the capsule, a matter in all probability quite outside his own control. The danger to the consumptive with his disease in a quiescent or arrested state lies in the bacilli which are embedded in his repaired lung. So long as the scars hold he is safe, and he remains what the world terms a "cure," but should they break down, bacilli are liberated and relapse

follows. Fortunately the maintenance of the integrity of the scars is largely within his own power, and it is on the maintenance of a good standard of general health that he must rely to achieve it.

The mode of development of consumption and the natural method of its cure, which I have just outlined, has been well described by Pottenger in the following words (reference: "Diagnosis and Treatment of Pulmonary Tuberculosis"):

"It is probable that the first entrance of tubercle bacilli into the body, with the formation of the first tubercles, causes few if any recognisable symptoms. Tuberculosis as we know it, as we are able to detect it, is a process more or less advanced. A tubercle is a tiny structure, about the size of a millet seed. In order to be able to detect a tuberculous focus, the area of involvement must be of considerable size (some authors claim as large as a marble). Thus it can readily be seen that we diagnose the disease after it has extended.

"This tendency to spread, in fact, is one of the characteristics of the disease, and the one thing which causes tuberculosis to destroy life. There is always a battle fought when an infection occurs. On one side, we have the tubercle bacilli; on the other, the defensive forces of the individual attacked. If the latter are

sufficient, the invaders are destroyed ; if not, the bacilli are deposited in the tissues and form a focus from which they continue to attack their host, endeavouring to establish themselves in new tissue. Often, while the defensive forces are not sufficient to destroy the invading organisms, they are sufficient to check the progress of the invaders and prevent them from entering new tissue. In Nature's effort to protect the host, she sometimes throws a wall around the bacilli, and retains them imprisoned ; sometimes she converts the seat of infection into calcified areas ; and, again, she causes a necrosis of tissue with breaking down and scattering and, sometimes, expulsion of the germs. When the bacilli are walled off, or encapsulated as it is called, they may retain their vitality for years and yet may never cause any further trouble. On the other hand, the patient's resisting power may be lowered ; or some inflammatory disease may affect the air passages, such as bronchitis, *la grippe*, or pneumonia ; or through some action on the part of the germs themselves, the encapsulating wall may be broken down and the bacilli may escape and form new tubercles in previously healthy tissues."

A further question to which a patient often wants an answer is as follows : "Since it is well recognised that the bacilli may be ultimately

destroyed, for how long a period does the condition just described, namely, of bacilli lying dormant, hold good?" In other words, for how long a period—granted continued good health and freedom from symptoms of consumption—may this state of arrested or quiescent disease persist, without the accomplishment of absolute cure?

Absolute and apparent cure are two very different things, though they have a dangerous resemblance to each other. By apparent cure I mean normal health, but with tubercle bacilli still present in the lung; by absolute cure I mean normal health, but with bacilli no longer present. To the question above quoted, which is one that is asked with most anxiety and interest both by patients and their friends, no certain answer can be given. Disappointing as it may seem, it is better that this fact should be understood at once. The knowledge of it may help to make the patient more careful, and his friends more sympathetic, though none the less hopeful. The case stands thus—although there is abundant evidence that the bacilli can be ultimately eradicated, it has been said, and not without reason, that the one absolute proof of cure, viz., the absence of all bacilli from the parts originally diseased, is only to be obtained after death, so

marvellous is the capacity of the bacilli to live in the human body without giving indications of their presence. This, of course, is an extreme point of view. But for practical purposes, it is necessary to have some proof of cure during life. Can any such be found? Unfortunately, apparent cure and absolute cure give the same indications through the stethoscope, and there are no infallible means by which we can distinguish between the two conditions whilst the patient is alive. In the absence of any better method of proof, it is a good plan not to assume actual cure to have taken place until the patient has been absolutely free from all signs and symptoms incompatible with absolute cure for an uninterrupted period of two years. To take this two years' freedom from signs and symptoms as a test of cure is to adopt an arbitrary standard, but one which in practice is a sound one.

So much for the nature of consumption and its cure. To recapitulate the essential points—the rationale of the sanatorium treatment lies in:

1. Raising the general health of the consumptive to its highest possible pitch, thus restoring his power of resistance and arresting the disease.

2. Maintaining it there long enough to justify the assumption that the disease is cured.

The first stage of the cure is commonly brought about with comparative ease; a stay of some three to six months in a sanatorium is usually sufficient. This much the sanatorium physician can in a large proportion of cases promise to do for the patient. The second and last stage of the cure is a much more difficult matter, and in a very large measure it rests with the patient himself to compass it. The critical period is the twelve months that follow the patient's discharge from the sanatorium. To realise this is all important.

CHAPTER II

FRESH AIR

THE aim of the consumptive is to keep in good bodily health; and to this end he must lead a healthy life. In a well-conducted sanatorium, a patient lives under about as good conditions as are possible; it stands to reason, then, that the more of the principles of the sanatorium *régime* he assimilates into his life after discharge, the better will be his prospects. These principles I would name as follows: Fresh air day and night; regular hours; regular meals of good nutritive value; regular exercise and rest; suitable recreation; avoidance of any excess or fatigue; and early hours to bed followed by a good night's rest.

The question which every consumptive should ask himself is: "How does my ordinary life compare with the carefully ordered day of the sanatorium?" In what respects and to what extent can I rearrange my day so as to embrace in it the

sanatorium principles? To some it is a simple matter so to reorganise the daily routine that all the essentials for carrying on the cure are retained. This is specially so with the leisured classes. To others these same essentials appear at first sight to be hopelessly incompatible with the life that they must lead. It is surprising, however, how much can be done in the way of after-care even under the most unpromising conditions. Some patients can do more, others less; all can do something.

FRESH AIR

Nothing, if we except sufficient food, is of the same value to the consumptive as abundance of fresh air. Without fresh air to give him a natural desire to eat, even a good supply of food may be of no service. A considerable sacrifice is justifiable on the part of the patient to secure conditions of life and work which will allow of his obtaining plenty of air and light. This question of air is intimately associated with that of employment. To those, for instance, who have the means to live without working, the necessity for fresh air resolves itself merely into making a decision as to where to live. The town-dweller is well advised to move into the country,

choosing a district which has a porous subsoil—for instance, gravel or sand—where there is plenty of sunshine and the rainfall is relatively low. A moderate altitude is often advisable so long as it is not too much exposed. A clay soil is best avoided; also, when practicable, close proximity to large manufacturing cities. It is not a bad principle for a consumptive to settle in a place which he knows by experience agrees with him. There are those who never feel so well as when living in the bracing but somewhat boisterous counties of East Anglia, or the east coast and hills of Scotland; such people literally droop in a warm sheltered place in the south. Others, again, never feel well for long in bracing climates, and instinctively turn to spots which many would call relaxing.

The sea coast is often stated to be unsuited as a residence for the consumptive. My experience does not at all confirm this. Indeed, many former patients of mine have been living for years at seaside places with the best possible results.

In this matter of where to live, then, the consumptive must use his common sense. There is nothing specific from a cure point of view in any particular place or climate; some districts are naturally better than others, but in the main a patient

who is guided by the general principles just laid down will not go far wrong.

A very large proportion of consumptives, however, cannot afford to live in the place of their choice; they must of necessity return to their work, which means that they must live close at hand to it. Patients constantly say to me: "I cannot possibly follow your advice so far as the fresh air is concerned. I must go back to my office or business house where the air is never fresh." This state of affairs applies particularly to those who work in large cities. My advice to such patients is for them to contrive in every way possible to get fresh air, if not when at work, at least when away from work. The man who directs his own business, and who is able to arrange his life to some extent, can always contrive to have an airy office. This usually means having a room to himself. I have in my mind several offices within a few minutes of the Mansion House (City of London) in which the windows are never closed, and which are always sufficiently airy. The continued good health of the several occupants of these quarters is ample compensation for some slight inseparable inconvenience. Some of the professions readily lend themselves to a fairly open-air life. I find, for instance, that clergymen in the country, doctors,

especially if not living in big cities, and surveyors, can often make their lives quite "open-air" in character. The position of the subordinate worker is not so satisfactory; he cannot command his own conditions. A judiciously expressed appeal to his employer, however, not infrequently results in the patient returning to more hygienic conditions than he had hitherto worked in. Sometimes this is obtained by giving him a branch of his work which is less confining in character.

Employers of labour, in my experience, are very good to their servants, and a few hints from the director of a sanatorium as to the requirements of the patient when he returns to work are often fruitful. This information must be tactfully given, as it is not to the best interests of the patient for his employer to feel that he is taking back some one who is no longer fitted for his work.

There must still remain many to whom fresh air during their day's work is really unattainable, and to whom the obtaining of some other occupation is even more impossible. But if they cannot make their day satisfactory, they can at least to some extent make up for this at night. It is within the reach of practically everybody to get abundance of fresh air during the ten hours or so when they are not

working. This fact is often overlooked. If the consumptive must live in a town, he should at least live in the healthiest part of it, or preferably in the nearest available suburb. His house, too, should be chosen with a view to getting as much light and air as he possibly can when at home. If his circumstances allow of his living a little farther out in the country and going to his work daily by train or tram, he should do so. It may mean starting a little earlier in the morning and getting back a trifle later in the evening; but it is worth it, if as the result he is to breathe fresh wholesome air throughout the night.

In the neighbourhood of London there are plenty of healthy suburbs, and I know of no towns which have not healthy districts within easy access. Where there is no alternative but to live in a town, remember that the principle "get as much air as you can" holds good. Live and sleep with the open window; if the air that comes in is not of the purest, it is certainly better than the air which has been repeatedly breathed. I know by experience that the man who lives the open-air life in lodgings in town is not a popular person with landladies; he must aim at being ideal in other respects to secure toleration.

There should be no sensible difference between the outside air and the air within the house except that in the winter the latter may be warmer. This is a very good test of efficiency. In many houses, to pass the front door is to enter a region of intolerable stuffiness. No patient should be content to live under such conditions. Remember that there is no truth whatever in the idea that night air is prejudicial; on the contrary, the air of night is positively better in many places, especially so in towns.

Fog, too, is rarely bad enough to justify a closed window. Better a little fog in the room than stuffiness. Another common fallacy is that fresh air in the house causes colds. So far from this being true, it is about the best preventive. The common cold is unknown in a sanatorium unless introduced by a new-comer or visitor, and even then it is soon lost.

Many people complain that to live the open-air life means to live in a perpetual draught. This is not the case. Air rushing through a small aperture such as a keyhole or a crack in a door creates a draught—not so a good volume of air coming in from a widely open window.

It is as well to remember that there is no merit in

being cold and uncomfortable, or perhaps one should say uncomfortably cold. It is positively harmful. The consumptive should never be really cold, and a fire in a room is quite compatible with abundance of fresh air. Warm clothing, too, is indispensable. There is no call for the patient to dress and undress in a cold room unless, indeed, he prefers to do so. When getting up and going to bed during the cold weather, he should close his windows for the time being.

The patient who lives at home often experiences difficulties with regard to the open window. His family do not appreciate it. The robust-looking consumptive is apt to be regarded as selfish and a crank; it seems unreasonable that the healthiest-looking member of the family should require such exceptional conditions. Here again, the sanatorium physician can often make the way easier for the patient; the why and wherefore for the open window come better from the doctor. However understanding his people at home may be, it is always a good plan for the patient to have one room at least which is entirely his own. This should be an open-air sanctuary in which he can dictate his own conditions. If the family abhor the open window, he is well advised to spend most of his indoor time in his

own room. For a meal it is usually more convenient for him to join the family. In his bedroom the open window difficulty should cease to exist.

The working classes in large cities are clearly much handicapped in respect of fresh air. To them the open spaces, public parks, &c., are a great boon. Many of the poorer consumptives in whom I have been interested have followed out the sanatorium treatment, relying on their scanty gardens or back yards and the public parks for their open air; and have done wonderfully well. In more than one case the park of an evening has proved a good exchange for the public-house, from a financial point of view, quite apart from the point of view of health.

A garden is a great asset to a consumptive, whatever stage of the cure he may be in. Whether he is at home all day, or only after the completion of his day's work, the more time he spends in his garden the better. A practical interest in the care of flowers, &c., should be encouraged, or kindled, if not already existing. There are few sounder hobbies for the consumptive than gardening, however humble a scale it may be on.

SHELTERS AND CHALET'S

Some form of chalet or summer-house is also much to be recommended. They can be bought or built at quite reasonable figures.

The following excellent advice as to shelters is given by Dr. Rufenacht Walters in his recently published work, "Open-Air or Sanatorium Treatment of Pulmonary Tuberculosis" (Baillière, Tindall and Cox, London). I have to thank Dr. Walters for his permission to make this quotation.

"There are two kinds in general use, in one of which cross-ventilation is secured by windows placed on all sides; the other kind being a revolving shelter. The ordinary revolving shelters are too small to be convenient in bad weather, and require special protection at such a time in the shape of screens and awnings. Moreover, they are usually made without any window or ventilator at the back, so that they are only fit for windy seaside places, for which they were probably originally designed. This lack of a window behind is a grave defect, which should always be remedied. Apart from this, a small shelter is inconvenient in rainy weather, and unfit for use in warm, still weather. However, at

other times, and in windy places, a small revolving shelter may be extremely useful.

“A good shelter should be of reasonable size, have a dry floor, a roof big enough to keep off rain, ventilation on all sides, a free space round it, walls high enough to fend off wind, but low enough to allow any one on a lounge-chair to see out easily. It should be made smooth inside, so that it may be easily kept clean. This refers especially to the parts within three feet of the floor. It should be fairly lasting, able to stand high wind, and provided with screens or curtains for privacy.

“A convenient size for the floor is twelve feet by ten feet for an undivided shelter, eighteen feet by ten feet for a double one. The floor should be raised one foot above the ground on piles or pillars ; and if the soil be a damp one (clay or loam, or alluvial soil), the surface may with advantage be covered with concrete to a distance of three feet outside the hut. On dry, sandy, or rocky soil this would not be necessary, nor if the shelter were placed on a rapid slope.

“The height of the roof depends partly upon the kind adopted. A steep pitch throws off rain best, and therefore is likely to last longer ; but it cannot be prolonged into wide eaves without blocking

up the view and hindering access of air. Also, if windows are made to open outwards, they require head-room under the eaves. In one style of hut, therefore, you have a steeply pitched roof with almost no eaves, rain being kept out by awnings;* in another style there is a low-pitched roof, with wide eaves, awnings being unnecessary. In the first case a convenient height for the roof would be six feet six inches from the floor at the eaves, and eleven feet six inches at the gable, the roof projecting four inches beyond the walls; in the second case, seven feet from the ground at the lowest part of the eaves, eight feet at the highest part of the eaves (seven feet from the floor), and eleven feet from the floor-level at the gable. In this case, the eaves would project three feet from the walls on every side.

“The addition of a false roof or ceiling inside makes the shelter warmer in cold weather and cooler in summer.

“In such a shelter as the above the door might be six feet six inches by two feet six inches, with the upper four feet glazed.

* The windows cannot be depended upon to keep out rain, as they will usually be left open. The whole of every shelter window should be made to open.

“Four windows might be put in, each four feet six inches by three feet six inches, one on each side of the hut, placed two feet six inches from the floor. A ventilating space of three inches should be left all round next the roof, and a triangular open space at the ridge of the roof on each side.

“Windows are not indispensable in a sleeping shelter, so long as there are window spaces and protection against rain. If windows are put in they may be French casements, opening outwards or inwards; in the latter case a larger shelter is required, but the windows do not require cleaning so often. Another way is to have counterpoised casements which drop between the outer and inner parts of the walls, or similar ones fixed like a railway-carriage window. In the absence of windows the spaces may be filled with louvred shutters at night, or protected by blinds, curtains, or awnings of waterproof material, such as waggon-cloth. The same material serves well for awnings. It should be supported in such a way that rain does not collect on it in pools.

“In the foregoing description it has been assumed that the shelter is to be made of wood. This may be covered outside with corrugated iron, tarred weather-boarding, plain boards tarred, asphalted, or

painted,* well-painted floor-cloth, Willesden paper on wooden frames, or painted canvas or waggon-cloth similarly supported. A more durable and fireproof material is uralite (or Kent slabs), which can be nailed on like ordinary boards. The same material or a modification may be used inside, or ordinary varnished match-boarding, or one of the other above-mentioned soft materials on frames. At the Crooksbury Sanatorium one large shelter has been made of uralite and Kent slabs, rough-casted outside for extra protection against the weather. Another useful material is a kind of terra-cotta (Frazzi concrete) made in hollow pieces to fit on to iron rods. This is cheaper than brickwork, and more quickly constructed. It has been used at the Workers' Sanatorium at Benenden, in Kent.

“The Ducker Company make shelters of compressed paper. These have been extensively used in some German sanatoria, and also in England.

“For roofing there is nothing better than good roofing felt, placed over match-boarding or plain boards, well sanded and tarred, although corrugated-iron sheets are also used. The latter have the disadvantage of being good conductors of heat, and

* It is an advantage to have the boards grooved and tongued, like a high-class floor.

therefore make the shelter hot in summer and cold in winter ; moreover, they are noisy when rain falls, but this can be partly remedied by a thick layer of felt underneath.

“There is an unreasonable prejudice against wooden buildings and shelters. If carefully made, with an air-space between the inner and outer skins, they are as warm as more solid buildings, and much drier than newly built brick houses, or old ones with an insufficient ventilation. The chief drawback is the greater risk in case of fire, which is the reason why wooden structures are contrary to the building regulations in many places.

“The furniture of the shelter should be such as will stand damp air. Metal fittings, bedsteads, &c., should be painted or enamelled, or they will rust. Bamboo, wood, and wickerwork are the most widely used materials for such furniture. It is convenient to have a table with a top which can be sloped at an angle, to serve as a reading-desk. In a sleeping shelter space must be economised just as in a cabin on board ship. A hinged slab at the side of the shelter will be useful. The addition of a stationary wash-basin will save some attendance. In this country, heating apparatus is not much needed in a sleeping chalet, but hot-water pipes may be added

with an outside furnace, or a brick chimney with a fireplace may be built on. Where the flue-pipes pass near wooden structures there is some risk of fire. There should be at least nine inches between the flue and the nearest woodwork of the building.

“Lighting is best by electricity, as this is unaffected by wind. If paraffin lamps or candles are used they should be fixed, and the flame should not be left near the woodwork. One method of fixing portable lamps is to slip them into a ring at the end of a fixed bracket.

“A good sleeping shelter may be constructed in the recess between two bow-windows, or in front of an ordinary sitting-room window, if the room itself has not to be used much. For this purpose a wooden platform should be erected a foot above the ground, a framework of stout timbers (three inches by three inches, or four inches by four inches) raised on this, with a sloping roof made with waggon-cloth or roofing-felt supported on battens four inches apart, or of more lasting material. For the sake of privacy three or four curtains of waggon-cloth may be run on rods round the three outer sides of the shelter; but these curtains should usually be drawn aside to admit the fresh air.

“In most of the better sanatoria summer-houses

of various kinds are freely provided for rest out of doors. Those physicians, however, who model their practice strictly on that of Nordrach Colonie, in Germany, object to any kind of shelter, and expect their patients to rest under the open sky, or in their bedrooms. In fine weather rest should always be taken in the open, a shady spot being selected if there is hot sun. Rest in the bedroom is likely to be more absolute than in a common shelter, owing to the absence of talking. This is important in early stages of convalescence, much less so later on.

“Tents are sometimes recommended for open-air treatment. An ordinary tent is, however, not at all airy, and cannot be recommended for the purpose. The chief fault is the lack of ventilating outlets above. To be satisfactory an outlet is needed almost the size of an ordinary window, which cannot easily be made rainproof. Moreover, in wet weather, if anything solid touches the canvas, the rain is apt to drip through at that place. There is no difficulty about the inlet, as a space can be left round the tent below, and in the daytime the door of the tent is sufficient.

“A tent is usually hot in sunny weather, unless it has a double roof with a space between. In hot weather, if the house shadow cannot be used, and

there are no trees, a tent with a double roof and all the sides left open gives very good shelter against the sun. In camping out, a square or oblong waggon-cloth tent, with double-pitched roof, may be made both airy and rainproof by letting the roof project beyond two of the sides like eaves, and leaving a space open next the peak in front and behind.

“A good sun-screen may also be made with a slanting piece of canvas supported on poles ten feet high, fixed with tent-cords, or else planted in the ground.

“For a wind-screen, make a stout framework of wood five feet to eight feet high, with two upright and two horizontal bars, fixed with tent cords. Along the uprights, at equal distances from the ground, drive in three-inch nails, leaving one and a half inches projecting. These nails should be four inches apart. Boards five inches wide, with holes to correspond with the nails, may then be slipped over them, overlapping each other.”

A useful book on the subject of chalets has just been published by Messrs. Wright of Bristol. The author, Mr. Stanley Bates, in this little volume entitled “Open Air at Home,” gives full and practical directions as to how to build an open-air shelter.

Shelters for sleeping in are to be recommended for any one who is prepared to put up with the slight inconvenience attaching to an open-air bedroom. No amount of open window-space in an ordinary house bedroom is so satisfactory as a well-constructed chalet. The pleasure and benefit to be gained by sleeping really in the open air cannot be appreciated by any one who has not actually experienced it.

“Night is a dead monotonous period under a roof; but in the open world it passes lightly, with its stars and dew and perfume, and the hours are marked by changes in the face of Nature. What seems a kind of temporal death to people choked between walls and curtains is only a light and living slumber to the man who sleeps afield.” One who sleeps thus will, with R. L. Stevenson, “think with horror of the inn, and the congregated nightcaps; with horror of the nocturnal prowesses of clerks and students, of hot theatres and pass-keys and close rooms.”

To the unaccustomed, the light in early morning, and the unwonted sounds to be heard off and on throughout the night are at first somewhat trying, but not for long. In cities I have had patients sleep contentedly and with obvious advantage on the most meagre of roof gardens and flat roof-spaces.

Apropos of this question of air, I might now refer

to the best type of window and bedroom generally. A south or south-east aspect is perhaps the best, but aspect is not of paramount importance. Better a good-sized, well-ventilated room facing north than a pokey room with small window-space looking south. It is an advantage to have a window or a ventilator over the door of the room, so as to secure a through ventilation; if the room has windows on both sides, so much the better. The ordinary sash window is best replaced by windows which swing open and can be fastened in this position. Folding louvred shutters of the same shape as the window are a useful addition, as in wet weather they allow of the window being kept open without risk of the room being swamped. When there are such louveres the windows must be made to open inwards.

FRESH AIR ON SATURDAY AND SUNDAY

Nearly every one who works gets a half holiday on Saturday and a whole day on Sunday. This time should be used to the best advantage; it should mean rest, recreation, and above all fresh air. It is at the week ends that patients who live in the country or suburbs reap the full advantage of so

doing. Even for town-dwellers it is a simple matter to get into the country at the week end. A good many of my old patients, who have for years been working and living in London and other large cities, spent their Saturdays and Sundays in some country or seaside place, for a year or more after leaving the sanatorium. This is certainly a good plan when possible. An excessive or fatiguing walk, or a heavy day's cycling, do not of course represent a healthy open-air day in the country; I refer to this again when speaking of recreation. It is as well to mention it here, however, as I have known of days being spent in a most foolish and harmful manner, the excuse being that the patient was aiming at getting fresh air and exercise.

CHANGE OF AIR

There can be no two opinions as to the value of change of air from time to time for every one. To the consumptive such a change is even more desirable. It often gives an impetus forward to the patient whose progress has become somewhat stationary. A complete change of surroundings is often the best tonic mentally and physically.

HEALTH RESORTS

FOREIGN CLIMATES, ETC.

It is not necessary for me to say much about health resorts. Those who are able to afford the luxury of foreign climates are well advised to seek medical advice as to the best place for them, as no one place is ideal for all types of consumption. There can be no doubt as to the value of a residence in the High Alps. There is something particularly exhilarating and health-giving in the sunshine and still air of such places as Davos, especially so during the winter months. The better the climate the easier it is to carry out the cure, but cure can be achieved under any conditions. I must confess, however, that to my mind sanatorium life during the winter months is pleasanter in a dry sunny place than in Great Britain.

*“Cœli tristitiam discutit sol, et humani
nubila animi serenat.”*

The Alpine resorts, the South of France, the West Indies, Teneriffe, and the Canary Islands are, amongst others, suitable places for winter quarters.

SEA VOYAGES

My experience of sea voyages has been somewhat conflicting, and I do not think that they should be undertaken except after the fullest consideration. In the first place, they are unsuited to any one who is not well advanced towards cure, or at least thoroughly convalescent. The average ship gives poor facilities for the treatment of invalids, and for refinements of nursing, dieting, &c. A relapse under such conditions is apt to be a very serious matter, considerably more so than on land. I have known of several instances in which attractive-sounding voyages taken on small steamers have ended disastrously. The following letter from a former patient is a good example :

“I am not so well. In January I went out to the Cape in a tramp steamer. From the Cape the boat was ordered to go to Calcutta, and as I was keeping very well I decided to go on there, instead of exchanging to a home-going boat. This proved disastrous. We arrived in Calcutta in April and from thence to Bombay, leaving for home again in May. In India I was nearly dead with the heat and lost my voice. Coming home through the Mediterranean I was perished with cold. On arrival home my doctor reported some extension of my lung

disease, and I have lost a stone and a half in weight since leaving England.”

I do not deny that now and again a serious case of consumption does very well on the sea. I have in my mind a good instance of this in the person of a doctor friend of my own. More than twenty years ago, when just qualified, he developed symptoms of consumption and rapidly became seriously ill. He was literally carried on board a sailing ship, bound for Australia and back, and from the first day to the last lay on the deck protected merely by an improvised awning. I should add that he was one who loved the sea and was a splendid sailor. He very rapidly responded to the life of fresh air, and the end of his voyage found him apparently cured. He wisely settled down into an ideal country practice, and from that day to this has had no sign of a recurrence of the disease. This case I look upon more as an exception than as an example of the general rule. I would say that a sea voyage is likely to be beneficial if the following conditions are fulfilled :

If the patient is convalescent, a good sailor, and has a good digestion ; if the cabin accommodation is good, for preference on deck, and the proposed route avoids unhealthy districts.

Nothing could be much worse, for instance, than a voyage on a tramp steamer trading with the West African ports.

The most satisfactory trip in my experience has been the voyage to Australia on one of the passenger-carrying sailing ships. A voyage on a large steamer running to South Africa, for instance, is often very beneficial, but on such boats it is less easy to live the simple open-air life. The consumptive in search of health does not want to see much of the saloon or the smoking-room ; and the bar should be unknown to him.

In pre-sanatorium days sea voyages were recommended to patients far more frequently than is the case at the present time ; and in this respect, compared with the experience of some of the more senior members of my profession, my own first-hand information is somewhat limited. Dr. Theodore Williams, for example ("Aerotherapeutics," London, 1894), has had a very favourable experience of sea voyages, and his published records of patients thus treated are good evidence of the efficacy of this form of open-air treatment. In Dr. Williams's opinion, also, the voyage to Australia on a sailing boat is the most satisfactory one.

CHAPTER III

FOOD

It is absolutely essential that the consumptive should take plenty of good food. He does best when he takes meals of somewhat larger nutritive value, if not larger in bulk, than those taken by most people in health. The mere fact of living so much in the open air makes a slight increase necessary; healthy members of the sanatorium staff frequently eat as much as the patients. The consumptive above all has to repair the waste due to his disease. His meals, as well as being sufficient, should be taken regularly and at good intervals. Three substantial meals a day is the best arrangement. There is no need for him to stuff; a slight increase on his ordinary meals is sufficient. It is best to rely upon a comparatively simple diet, what is generally termed good plain food. The commoner joints, poultry, fish, eggs, porridge, milk and suet puddings, bread, butter, cheese, fresh vegetables, milk, and fruit, should con-

stitute the basis of the daily menu. Made-up dishes, twice-cooked meats, and food-stuffs notoriously indigestible in character, should be taken but sparingly. Aim at simplicity, variety, and good cooking. The following (pp. 38, 39) is a good example of the right kind of diet (from "A System of Diet and Dietetics."—SUTHERLAND).

It will be noticed that the meals advised are composed throughout of nourishing kinds of food. As compared with ordinary meals, the increase in the amount of meat, butter, and milk is perhaps the most noticeable feature.

On such a diet, the consumptive who has lost a good deal of body weight should regain it at the rate of a pound to two pounds a week. This rate of gain is evidence that the diet is adequate. The increase in weight should be steady week by week, until the patient has reached a point a few pounds in excess of what should be his normal weight when in good health. To put on weight in such excess that he becomes flabby and short-winded is most undesirable. If there is this tendency to become too fat, less food should be taken. The diet may be readily modified in the first place by reducing the amount of milk and butter.

The average patient, when he leaves the sana-

MEN.		WOMEN.
<p>A soup-plateful</p> <p>1 pint</p> <p>$\frac{1}{2}$ oz. (a piece the size of a walnut)</p> <p>Three triangles of toast, or a round and a half of bread</p> <p>An ordinary helping</p>	<p style="text-align: center;">BREAKFAST</p> <p>Porridge (oatmeal, rolled oats, &c.) sugar and cream</p> <p>Milk</p> <p>Butter</p> <p>Bread or toast</p> <p>Egg, bacon or sausage, &c.</p> <p style="text-align: center;">DINNER</p> <p>Meat (hot or cold)</p> <p>Potatoes</p> <p>Green vegetables</p> <p>Milk or suet pudding</p> <p>Milk</p>	<p>Four tablespoonfuls</p> <p>1 pint</p> <p>$\frac{1}{2}$ oz. (a piece the size of a walnut)</p> <p>Two triangles of toast, or a round of bread</p> <p>An ordinary helping</p> <p>3 oz. (a large plateful)</p> <p>3 oz. (two the size of a hen's egg)</p> <p>As desired</p> <p>4 oz. (a large helping)</p> <p>1 pint</p>

<p>1 ½ oz. (half a round) ½ oz. (a piece the size of a walnut)</p>	<p>Bread Butter</p>	<p>1 oz. (half a round, thin) ½ oz. (a piece the size of a walnut)</p>
<p>Three slices thin bread and butter</p>	<p>Bread Butter Jam, cake, cress, &c.</p>	<p>Two slices thin bread and butter</p>
<p>SUPPER</p>		
<p>3 oz. (a large helping)</p>	<p>Cold meat, boiled ham, tongue, fillets of fish, brawn, sausage, macaroni cheese, &c. &c.</p>	<p>2 ½ oz. (a large helping)</p>
<p>5 oz. (a fair-sized helping)</p>	<p>Cold sweet, such as cream blanchmange, fruit and custard, trifle, &c.</p>	<p>4 oz. (a fair-sized helping)</p>
<p>1 pint</p>	<p>Milk (possibly made into cocoa)</p>	<p>1 pint</p>
<p>2 oz. (half a round, thick)</p>	<p>Bread or biscuit (with cheese if preferred)</p>	<p>1 ½ oz. (half a round)</p>
<p>½ oz. (a piece the size of a walnut)</p>	<p>Butter</p>	<p>½ oz. (a piece the size of a walnut)</p>

torium, has put on all the weight that is necessary. He has also become accustomed to the kind of diet that he should take. The question he usually asks is: "How long must I keep up with this increased amount of food?" The answer is: "Until cure is presumably complete, *i.e.*, until disappearance of all signs and symptoms of the disease, and for some two years after that."

This advice sounds simple enough, and is in fact easy to carry out, so long as the patient lives in the open air. The inexperienced can scarcely imagine how difficult this duty to eat may become under other circumstances. The clerk who exchanges the pure air of the country for the ill-ventilated city office will not face his luncheon with the same appetite. He must eat it all the same. I am convinced that a predisposing factor to the contraction of the disease is in many cases indifferent meals, habitually taken. I am not now speaking so much of the poorer classes; with them unfortunately this is a predisposing cause which is often unavoidable. I am referring more to the people of moderate income, young men, for instance, who with a little management could obtain proper meals.

A hurried breakfast at 8 A.M., a run to the train, and a lunch of a glass of beer and a sandwich,

followed by cigarettes in a stuffy atmosphere, the latter completing the hour allowed for lunch, is not a good routine for any one, much less for a consumptive. Every patient should give himself time to have a good breakfast before starting the day. This is merely a question of getting up early enough. A good lunch in the middle of the day is also necessary; for example, meat and vegetables and bread, followed by milk or suet pudding or bread, cheese, and butter with a glass of milk. Such a meal is to be obtained in town restaurants for a sum varying from tenpence upwards. Those who can arrange to have luncheon at home should have no difficulty in this respect. Most people who work have an hour allowed them in the middle of the day. This should admit of a short stroll and time for a proper meal. Don't waste any of this hour indoors however tempting may be the smoking-room. It is often a difficult matter to find a restaurant which is both economical and airy, but make it your business to find the best that there is. The better the ventilation the easier it is to eat. There is a story about a restaurant-keeper who, wishing to be up to date, modelled his premises on open-air lines. As a result, his clients had such good appetites that the ordinary helpings no longer satisfied them. They objected, however, to

any increased charge, so the caterer, as a business man, found it necessary to curtail the amount of fresh air. This story well illustrates my point. Sometimes a patient can obtain more fresh air in his own place of business than in any restaurant. In such a case he may do best to bring his luncheon from home with him and eat it in his own office, for instance. I have seen this plan adopted with conspicuous success.

Tea I regard more as a luxury ; it is not essential. If it can be had conveniently, take it. If a good luncheon cannot be obtained, a fairly substantial tea at about 4.30 is to be recommended.

The evening meal is important. It should be similar in character to the luncheon.

In many sanatoria, patients take half a pint of milk twice a day, in addition to that taken with meals ; for example, on waking or in the middle of the morning, and on going to bed. I think it is a good plan to continue with the half-pint of milk on going to bed. If the arrest of the disease is by no means complete, an additional half-pint is advisable, making a total amount of two and a half pints daily, exclusive of milk taken in puddings.

For those of small means, whose buying must be skilled if the proper amount of food is to be bought

for the sum available for the purpose, the following hints, prepared by Dr. Chapman and myself, and published in Sutherland's "System of Diet and Dietetics," may be of service.

WHAT FOOD TO BUY AND HOW TO COOK IT

The following is intended to give you a rough idea as to how you can arrange your meals most satisfactorily, and the amounts of the various foods you require :

Breakfast. Half a pint of porridge with milk and sugar, a rasher of bacon or a herring, &c., a round of bread. Tea or coffee.

Dinner. Two large chops or a large plateful of meat, with plenty of potatoes. A teacupful of milk pudding, or a large slice of suet pudding, half a round of bread and a glass of milk.

Tea. At least three rounds of bread and butter with jam, or, if you can afford it, other relish.

Supper. Half a pint of pea, bean, or lentil soup, or half a pint of porridge ; two rounds of bread, with sufficient cheese for both pieces, and a glass of milk.

If you take this diet, you ought to gain at least a pound a week in weight, but if you do not, your best course is to take more milk until your weight increases.

The above diet should cost you about 6s. 6d. per week, but you will require to be careful as to what you buy, and the following notes will probably be of service to you in showing you how to spend your money to the greatest advantage.

Meat. If you cannot afford to buy English meat, buy the best foreign, which contains just as much nourishment and will not cost you more than 6½d. per pound for the best joints. If you cannot afford to buy joints you must be content to buy "pieces." Make full use of tripe, sausage, bullock's liver and kidney, which are cheap and nutritious, but do not waste money on veal or lamb.

Butter. Buy butter at 1s. a pound if you can afford it, but if money is scarce buy good margarine instead, at 6d. or 8d. X

Milk. You can always get new milk at 1½d. or 2d. per pint, but if you cannot afford to buy much new milk, buy what you can afford and make up with separated milk, which will cost you 1d. or 1½d. per quart. X

Cheese. Dutch cheese will cost you $4\frac{1}{2}d.$ to $6\frac{1}{2}d.$ and American $6d.$ or $7d.$ per lb. Do not buy more expensive cheese, as you will get no more nourishment for the extra cost.

Eggs. Except during the early summer, eggs are always an expensive form of food, therefore do not spend more on them than you can help.

Oatmeal. Oatmeal is one of the very best and cheapest foods you can have. Buy coarse Scotch oatmeal, Provost or Quaker oats, and have a plateful of porridge every morning and, if you like it, occasionally at supper instead of the soup.

Dried peas, beans, and lentils. These, like oatmeal, are most valuable foods for you, and should be used every day either boiled as a vegetable for dinner or as a soup for supper. You can buy them at the grocer's; the peas and haricot beans will cost you $2\frac{1}{2}d.$ per pound or pint, and the lentils $2d.$

Potatoes. These are required every day, and you will save money if you buy at least a stone at a time.

Fish. Buy fish instead of meat occasionally for the sake of a change, either cod, plaice, herrings, bloaters, finnan or fresh haddocks, or whatever fish is in season

and cheap. Tinned salmon at *5d.* a tin is a cheap nutritious food, and makes a good change for supper.

Rough directions for cooking porridge and vegetable soups :

Porridge. Stir oatmeal gradually into boiling water, add a pinch of salt, and cook gently, stirring occasionally for an hour (Quaker and Provost oats take only twenty minutes to cook). Allow two teacupfuls of water and two level tablespoonfuls of oatmeal to each man.

Lentil, pea, or bean soup. Soak the seeds in cold water over night. Boil gently in plenty of water until soft ; the cooked seeds may either be eaten as a vegetable, or they may be beaten to a fine paste, or, better still, rubbed through a sieve ; add a little of the liquid in which they were boiled, and a flavouring if required, to form a highly nutritious soup. Allow three level tablespoonfuls of the raw seeds for each man.

Some hints as to the dieting of dyspeptics, and those suffering from acute febrile attacks, are given in chapter v.

ALCOHOL

Very few people have so bad a chance of getting over consumption as the habitual or heavy drinker. Alcoholic excess, too, is a common predisposing factor to the disease. It is certain that tuberculosis is often contracted in the bars of public-houses. My feeling is that the consumptive is best without any alcohol at all. When convalescence has been thoroughly established, I think, however, that there is no harm in substituting a glass of beer or some light wine for the milk at meals. This is as far as I would go. Spirit in any form and at any time, but especially so between meals, should be absolutely avoided.

CHAPTER IV

REST AND EXERCISE—RECREATIONS

REST. Regular periods of rest and exercise form an important part of the sanatorium *régime*. The consumptive who has not been educated very frequently comes to grief over this question of exercise, and over-exertion is responsible for many relapses amongst those who have learnt the sanatorium treatment. I assume that the reader of these "after-care" hints has appreciated the general principles which guide the physician as to the amount of rest and exercise he prescribes. In most cases the former patient will have got over most of the early difficulties in this respect and be walking some miles daily. Should this not be so, he will be well advised to continue to rely on the direction of some one of experience. If such assistance is unattainable, I would advise him to treat himself on the general principle of taking no exercise at all if his temperature (rectal) after one hour's complete rest in the recumbent position

exceeds 100° F. at any time during the day. There are, of course, many exceptions to this general rule. Undue fatigue and much accelerated pulse after exercise are other contra-indications. The first exercise to be taken should be slow walking of, say, half a mile morning and afternoon. This should be gradually increased by an additional half-mile morning and afternoon every fourth or sixth day, supposing, of course, the progress to be satisfactory. Remember that rest at no time can do harm, and that exercise on many occasions may prove injurious; so, when in doubt, rest.

My advice to the convalescent is—continue if possible to keep up the hours of rest and exercise as when in the sanatorium, for at least some months after leaving. A period of absolute rest during the day is of greater value than most patients generally imagine. The hour of absolute rest before the mid-day and evening meals is very much to be recommended, and the less complete the arrest of the disease, the stronger is the necessity for these two rests. If a whole hour cannot be obtained, half an hour's rest is a great deal better than none at all; and again, if it is impossible to obtain even a short rest at midday, it should not be difficult to arrange for a quiet and restful half-hour before the evening

meal. The consumptive is always well advised to go to bed early; a good night's rest is of great value to him. 9. P.M. for the working classes and 10 P.M. for every one else are reasonable hours at which to finish the day.

EXERCISE AND RECREATION

Walking is the best form of exercise for consumptives, generally speaking; and certainly so long as his disease has the least tendency to activity, the patient is well advised to undertake nothing more exacting in the way of muscular exertion.

Those whose occupations entail leading a sedentary life can frequently manage to fit in some walking during the day when going to and from their work, or in the evening after their return home.

No one can expect to keep well unless he takes some exercise daily. To many this is an easy matter.

Former patients, such as clerks, business men, &c., often report to me that they take a walk every evening after their day's work and feel all the better for so doing. In this respect, too, there must be judgment; I am far from advising the man who

comes home thoroughly tired after a particularly hard day to go out for a duty-walk for several miles before his dinner. His time would be better spent in resting quietly in the garden or by his open window. On other days, no doubt, a short walk and a breath of fresh air would be decidedly beneficial.

Much greater latitude in the way of exercise is permissible to patients whose disease is quiescent or arrested, and whose general health has been in some considerable measure restored. I am repeatedly asked my advice as to the suitability of various games, field sports, &c., so will deal with these in some detail.

As a general principle, I would advise any one who has had pulmonary tuberculosis to abstain entirely from any game or sport which entails sustained and severe physical exertion, or sudden and violent muscular effort. As examples of such, I would instance football, hockey, and similar games.

CRICKET

I think it is safer for the consumptive to give up cricket; certainly he should not be a member of a match-playing team. As a matter of fact, there are former patients of mine who have played and do

play cricket regularly every season, and with no ill effect, but in no case did they recommence the game until after the completion of a year of normal health.

ROWING, SAILING, AND KINDRED PURSUITS

I have never seen any harm result from boating, sailing, &c., so long as the patient used his common sense. Any one who is a "wet bob" can obtain a good deal of recreation on the water with a very small expenditure of effort. I have seen, for instance, a good oarsman who had become consumptive do what to many would be a very hard day's sculling, without the least ill effect. The patient who is not expert in a boat had best attempt nothing at all ambitious. Much pleasure may be obtained by merely pottering about on the water, and it is this that I would recommend.

Bathing, especially sea-bathing, is beneficial to most patients.

CYCLING

For the large majority of patients cycling is a permissible, indeed a good form of recreation. Cycling should be more of a means to an end; that is, a

means of getting fresh air and steady exercise. A quiet ride into the country, with stoppages to note things of interest *en route*, or a run to some specially favoured spot with a view to resting there for an hour or so, should be the kind of thing aimed at. The last thing in the world one would wish to see is a patient amongst a party of dust-covered crouching cyclists tearing along the high road, whose sole object would seem to be the accomplishment of a certain mileage during the day. The consumptive, too, should never be ashamed of walking up a hill or of declining to ride home against a strong wind. The cycle, then, can be of great service if judiciously employed, but it can easily be abused. The motor-bicycle I should advise patients to have nothing to do with.

LAWN TENNIS

To be of the least interest, lawn tennis must be played strenuously; for this reason it is most unsuitable. No patient should attempt lawn tennis or similar games, such as rackets, until he has been apparently cured for two years.

RIDING, HUNTING, SHOOTING and FISHING. These forms of recreation are all good, inasmuch as they

can only be followed in the open air. Over-exertion and fatigue are perhaps the only dangers to be avoided.

WINTER SPORTS

Skating is a good form of exercise, and especially so for those who are fairly proficient at it. Curling is less suitable, but is a safe recreation for the expert, provided that his cure is well advanced. Ski-ing and tobogganing are best unattempted.

GOLF

As to whether a consumptive should play golf or avoid it is a matter of controversy amongst physicians. My own experience has been altogether in favour of it. I believe golf to be the best game that the consumptive can take up. As in the case of several other forms of recreation already referred to, I would not advise any patient to play the game until he is completely convalescent, i.e., able to walk at least six miles daily without any fatigue or rise of temperature. If golf results in fatigue or elevation of temperature it should be at once discontinued.

To those who are in a less convalescent stage, "putting," or a modification of "putting," termed clock or garden golf, is an excellent recreation. Short

approach shots and mashie play, to use the technical expressions, are of great interest and demand very little exertion from any one who possesses some knowledge of the game. Such minor golf recreations as these can be allowed at an earlier stage of convalescence than a full round of the links, and are well worth having.

BOWLS, CROQUET, and DECK QUILTS are games which I can recommend without any reservations.

GARDENING, or the pursuits of natural history, botany, and photography, have all much to recommend them.

MOTORING as a means of recreation also has many advantages.

BREATHING EXERCISES are frequently of value. They are especially to be recommended to young people with ill-developed flat chests. Slow deep breathing through the nose is the best form of exercise, the chest being alternately filled and emptied as completely as possible. This should be done for some ten to fifteen minutes morning and evening. These breathing exercises should not be commenced until the lung disease is quiescent.

113

MUSCULAR EXERCISES. Some forms of physical drill, when carried out under medical direction, are of undoubted benefit. Exercising with metal dumb-bells of some weight, or with various forms of mechanical developer is not to be recommended, especially for home use. The execution of slow movements designed to develop groups of muscles, but carried out without dumb-bells or other appliances, is the best method of physical culture for a consumptive.

SMOKING. Consumptives, if they smoke at all, should do so in great moderation. If there is any tendency to weakness of the throat, smoking is absolutely negatived. The worst time to smoke is shortly before a meal. Three pipes a day of good mild tobacco is a very fair allowance for any patient. It should be remembered that a pipe is much less calculated to do harm than are cigarettes.

INDOOR RECREATIONS

To refer briefly to indoor recreations. All such games as are compatible with the open window are naturally the best. Bridge, whist, patience, and similar card games; chess, dominoes, cribbage, &c.,

played in the open air have helped many a consumptive through his period of enforced idleness. Excessive play and gambling are obviously wrong. To go to a health resort and sit all day in a smoking-room playing cards is not a good programme for the consumptive in search of health. 2

9. Singing, piano-playing, and music generally are permissible to the large majority of patients.

Billiards is not prejudicial in itself, but its associations are apt to be undesirable.

Dances, theatres, the club, smoking concerts and evening entertainments generally are best given up until cure is absolute. During the summer months there are many open-air social gatherings which the patient can go to without misgivings. In the winter months he is less well provided for, and he is wise to entertain such of his friends as will not object to share his fresh air. Herein lies no mean test of friendship. To the young man or woman who is fond of social life and used to "going out," as it is termed, there is a good deal that must be given up. They must remember, however, it is only for a time. To grasp all prematurely is to lose all. 113

CHAPTER V

HINTS *RE* VARIOUS FACTORS IN SANATORIUM TREATMENT

CLOTHING

CONSUMPTIVES often make mistakes with regard to their clothing. The commonest error is to wear too much. There seems to be an idea that to wear an excess of thick clothing prevents catching cold; and that parting with some of it, even in warm weather, predisposes to a chill. As a matter of fact the reverse is the case. To be periodically overheated is exhausting and apt to give rise to chills. A little common sense is all that is required. The patient should regulate his clothing so that he feels comfortable and warm in all seasons. In the colder months of the year, like other people, he requires thicker clothing; this is especially necessary for him when resting in the open. Rugs, a long overcoat, warm gloves, and perhaps a hot-water bottle are serviceable

at this time. In the warmer weather his clothing should be less in amount and lighter in character. When living practically in the open air all day, even when indoors, it is not necessary to put on a heavy overcoat when starting for a walk. When walking, the muscular exertion produces heat, and the body is naturally warmed. It is sounder to reserve the overcoat to put on when lying down to rest by the open window on completion of the exercise.

Of course if the patient is leaving and returning to a warm room this does not hold good. To lie or sit in the open and become thoroughly chilled is wrong. Such a method of "hardening" savours more of suicide than of merit.

With regard to material. Wool in some form is the best material for underclothing and for night wear. It is warm and allows of free ventilation. It requires careful washing or it will shrink. Silk or cotton garments are permissible, especially in the summer, but are not so good. Linen next to the skin should be avoided. Women's underclothing for the winter months should be long in the sleeves and high in the neck. Woollen combinations are the best garment. All underclothing should be changed at least once a week. There is nothing more un-

wholesome than a chest protector. Such a thing should not be worn under any circumstances.

Bed-clothing. Common-sense principles apply also to bed-clothing. A patient should be comfortably warm, but not hot. The night sweats which sometimes frighten the convalescent are often due to too many bed-clothes. The remedy is certain and simple. In the winter months it is a good plan to warm the bed and the sleeping clothes. This is readily done with hot-water bottles.

Bathing. It is very important to keep the skin thoroughly clean. A tepid bath every morning, finishing with a cold douche or a run over with a cold sponge, is the best thing for everyday life. If this gives rise to a feeling of chilliness after the bath, the cold douche or sponge should be omitted. An occasional hot bath is best taken at night.

CARE OF THE TEETH


The proper care of the mouth and teeth is of the utmost importance. Teeth especially are much too commonly neglected. Every consumptive should make a point of seeing his dentist once a quarter. For preference, the teeth should be cleaned immediately after each meal, and the mouth then rinsed out

SANATORIUM TREATMENT 61

with a strong solution of bicarbonate of soda in water. This soon becomes a habit, if once commenced. The most important time of all to clean the teeth is when going to bed. Many clean their teeth once a day, when getting up. It should be remembered that most of the harm to teeth occurs during the night, hence the importance of going to bed with the mouth clean.

HOW MUCH OF THE SANATORIUM ROUTINE SHOULD A PATIENT ATTEMPT TO KEEP UP AFTER HIS RETURN HOME?

This is another question which is repeatedly asked. When giving a short lecture on this subject to all the patients who may happen to be in the sanatorium at a particular time, it is impossible to give more than general indications. The directions which are sound for one are often equally unsound for another. Patients are very fond of comparing notes as to the details of their respective treatment. They are apt to assume that what has proved beneficial to a friend is bound to prove beneficial to themselves. It would probably prove the opposite. It would be better if consumptives thought and talked less about themselves.



The various lectures in this book, taken together, constitute an answer to the question which heads this section. Clearly, the thoroughness with which any patient must follow out the sanatorium treatment on his return home must depend upon the state of his health at that date. If he goes home with his disease arrested or apparently cured, it will be enough if he embodies in his subsequent life the main principles only of the sanatorium routine. These are fresh air, proper meals, regular hours, &c. The details of the treatment, such as temperature-taking, &c., he can entirely dispense with. They have served their purpose, and he requires them no longer. On the other hand, one who goes home with his health but imperfectly restored should try to follow out in its entirety the treatment which he has been taught.

PERIODIC MEDICAL EXAMINATIONS

These are to be recommended. They should be made at least once a quarter. In many cases an overhaul once a month for some twelve months is advisable. Timely examination and warning may well result in the proverbial "stitch being taken in time." It should be borne in mind that it

is often very many months before sputum and bacilli are lost entirely.

WEIGHT

It is advisable also to weigh periodically, say every two or four weeks. Remember that it is essential always to weigh at the same time of day and in clothes of the same weight. Patients commonly lose a little flesh after giving up strict treatment. A loss of a few pounds on returning to ordinary life is nothing to worry about.

TEMPERATURE-TAKING

It is impossible to generalise on this point. Thermometer records are of the utmost value, and almost essential in the earlier stages of treatment. They are not so necessary when convalescence has been thoroughly established. The thermometer is frequently productive of more harm than good when left in the patient's hands. Many would be better if they had never learnt how to use it. It is the old adage of a little knowledge being a source of danger. It requires long experience and considerable judgment to interpret correctly the significance of variations in temperature. The patient is inclined to attribute

every little irregularity to tuberculosis. To some temperaments this gives rise to over-anxiety, which, if unchecked, may result in a condition of mind which is bad for the patient and insufferable to his neighbours. To the level-headed, sensible person, the clinical thermometer is a very valuable aid in home treatment. In any case, however, the fewer observations taken the better. It is enough to have the data required for the direction of treatment. The most valuable record is that of the temperature taken immediately on waking after the night's rest. This should be somewhere between 97° F. and 98° F. A trifle above or below these figures may well be within normal limits. The so-called normal temperature of the human body is not an arbitrary standard. Most patients learn by experience to know what their temperatures are when they are feeling well and making good progress. A temperature on waking of a degree or more higher than usual is a much more important matter. This usually signifies something wrong somewhere. It may merely be the result of a bad night, indigestion, constipation, a cold, a gumboil, perhaps, or some other transient indisposition. All such conditions may cause a rise of temperature of a degree or two. Women very often have an elevation of temperature

before or coincident with their monthly periods. When there is nothing to account for the rise, great vigilance must be exercised. If the unusually high "waking temperature" persists for a day or two, the temperature should be taken at 4 P.M. or 6 P.M., after an hour's complete rest. If it is then found to be over 100° F., consult a doctor. It is most important that the temperature should be taken after an hour of complete rest. Exercise increases the heat of the body, and a (rectal) temperature of from 100° F. to 101° F. shortly after a sharp walk is perfectly normal. This fact is not generally known. I have more than once seen this normal rise of temperature, following exercise, mistaken for fever. To take the temperature on waking, in the way I have just described, is in my experience a reliable guide in after-treatment. The patient who is not convalescent is in a different position. He must carry out the sanatorium treatment more in detail. This will include taking temperature observations on two or three occasions during the day. In his case, however, rather than be worried by temperature records it is better to take no observations at all. The success of the treatment does not depend on any one detail. It is in the continued observation of the general principles, and the con-

stant regularity of life, that success lies. As an example of a sanatorium routine, the following, which is the daily round at King Edward VII. Sanatorium, may be of interest :

- 7.30. Gong is sounded. Patients take their temperatures and get up. Baths, Hydrotherapy, &c.
- 8.15. First Breakfast Gong.
- 8.30. Breakfast Gong.
- 9-9.30. Leisure. Books can be obtained from the Librarian.
- 9.30. Gong is sounded. All patients must go direct to their rooms, or to that part of the balcony immediately outside their rooms, and rest on their chairs until they have been seen by their Medical Officers.
- 10-12. Rest or exercise as prescribed. On one day in each week, patients will attend in the Consulting-room at this hour.
- 12 noon. Gong is sounded. All patients must go direct to their rooms.
- 12-1. All patients must rest in their rooms or on their balconies. No talking is allowed.

1 P.M. First Luncheon Gong: Temperatures taken.

1.15. Luncheon Gong.

2-2.30. Leisure.

2.30-4.30. Rest or exercise as prescribed.

4.30. Tea in Entrance Hall.

5-6. Recreation hour for music, games, &c.

6 P.M. Gong is sounded. All patients must go to their rooms as at 12 o'clock.

6-7. Rest hour.

7 P.M. First Dinner Gong: Temperatures taken.

7.15. Dinner Gong.

8-9.30. Recreation.

9.30. All patients must go to their rooms.

10 P.M. All lights out.

HOW MAY THE CONSUMPTIVE KNOW THAT HE IS GOING ON ALL RIGHT? DANGER SIGNALS.

The patient who is on the eve of leaving a sanatorium often wants to know by what signs he may in future recognise that his cure is progressing to a favourable termination. Still more anxious is he to learn the signs which may give him timely warning that all is not going well.

So long as a consumptive feels and looks well, the

probabilities are that he is progressing favourably. The patient suffering from advanced disease, it is true, often deceives himself as to his state of health, but the truth is usually patent to his friends. To achieve cure there must be a complete restoration of the general health. So long as general health is improving or is maintained, it may safely be assumed that the lung disease is improving also. Good bodily health once regained, its retention is a reliable index of all being right. To lose gradually the feeling of fitness is a sure indication that the mastery over the disease is weakening. When a consumptive feels and looks ill, his position is becoming a very anxious one. As forewarnings of a possible relapse, the patient should be quick to notice the return of any symptoms which were associated with the commencement of his illness. In one, it may be undue fatigue after the day's work; not the natural fatigue that follows an occasional heavy day, but a constant feeling of being tired in the evening. This condition of fatigue is frequently associated with unwonted irritability of temper, a symptom often noted by a patient's family. In others, an early symptom of failing health is the gradual deterioration of capacity for work. This is equally true of mental and physical effort. With mental work it is harder to con-

centrate; the work takes longer to do than formerly. A bank clerk, for instance, finds an unaccustomed difficulty in adding up his columns. Digestive disturbances may be the warning; for example, gradual failure of appetite, followed by a continued loss of weight. An occasional attack of indigestion or other slight digestive breakdown is not uncommon even amongst those who are doing well. The indication is to rest the organs concerned. To force the food down at these times is calculated to do harm. A good aperient, followed by smaller meals for a few days, is the best treatment. If there is continued difficulty in taking proper meals it is a good plan, for a time at least, to reduce them, but as compensation to increase the nutritive value of the foods taken. The addition of a tablespoonful of some casein preparation to each half-pint of milk, or to milk puddings, soups, &c., is a simple method of doing so, and if carefully mixed with the food it cannot be detected. Cream, cod-liver-oil, and maltine are also useful food-stuffs to fall back upon at these times.

Patients who suffer from dyspepsia must modify the sanatorium diet. They should exclude from their menu those foods which experience has taught them to recognise as indigestible. The more bulky food-stuffs, such, for instance, as porridge and potatoes,

can often be omitted with advantage. Flatulence after meals is often much relieved by soda-mint tabloids. Before resorting to any drug, the dyspeptic should make sure that his teeth are in good order for their work.

with sputum

A marked increase in cough and sputum not associated with a passing cold should attract attention. An irritating cough, without much sputum, is often due to a relaxed throat. It is easily remedied, as a rule, by painting the back of the throat with glycerine and tannin. With men this condition is often due to smoking. To cough up a little blood is usually a warning of some import. To be on the safe side the spitting of blood should be treated by immediate and absolute rest in bed, this to be maintained until medical advice has been obtained. In the event of a more severe attack of bleeding, in short, of hæmorrhage, the first-aid treatment is very similar—absolute rest in a recumbent position, no movement being allowed for any purpose. The patient should not even be undressed until the doctor has seen him. Food must be cut down to a minimum, for instance, to a few pieces of thin bread and butter and a few ounces of milk during the first twenty-four hours. It is well also to give the patient immediately a strong saline aperient, such as Epsom salts. Keep

the bedroom quiet and well ventilated. Remove all friends and relations with the exception of one capable attendant, and send for the nearest doctor. On no account give brandy or other stimulant; some faintness is to the patient's advantage. It is not unusual for the gums to bleed after cleaning the teeth. I have more than once known blood from this source to be mistaken for hæmoptysis. With a little attention such a mistake should not be made.

A gradual loss of voice should never be neglected. This symptom may have no bad significance, but it is wise to make sure by taking good advice. Tuberculosis of the larynx, if not recognised early, is a serious matter.

DANGER OF INFLUENZA AND OTHER ACUTE ILLNESSES. All acute illnesses are a menace to any one with consumption. There is a risk of the constitution becoming run down, and the tuberculosis becoming active. It is particularly important that a patient should not, under these circumstances, be kept on what is generally termed a slop or invalid diet. Such a dietary is nearly always a very inadequate one. Food is most easily taken in a semi-fluid form, but it should contain plenty of nourishment and be given systematically. Beef tea, it should be borne in mind, is a preparation which, though valuable as a stimu-

lant, is valueless as a food. The following diets fulfil the necessary conditions, and are thoroughly satisfactory in practice. They are taken from the article "Diet in Tuberculosis" (Bardswell and Chapman), in Sutherland's "System of Dietetics."

FOR MEN OR WOMEN

8 A.M. (on waking).	Milk, half a pint.
9 A.M.	Milk (with casein) made into tea or coffee, half a pint.
Breakfast.	Boiled bread and milk, half a pint. One egg poached or scrambled on small piece of buttered toast.
11 A.M.	Benger's Food with casein, half a pint.
1 P.M.	Milk, half a pint Toast (or rusks) and butter, half an ounce.
	Pounded chicken, &c. } Two or Steamed fish or raw meat } three Sandwiches } ounces.
	Thin custard, half a pint.
4 P.M.	Tea made with milk, half a pint.
6 P.M.	Milk, half a pint. Fish or pounded chicken, &c., two or three ounces. Toast (or rusks) and butter, half an ounce. Junket, light pudding, &c., five ounces.

FOR MEN OR WOMEN

9 P.M. During night	Benger's Food with casein, half a pint. Milk and egg (with or without alcohol), half a pint. One and a half ounces of casein should be worked into the diet daily, and five ounces of cream added to the day's supply of milk.
------------------------	--

FLUID DIET

8 A.M.	Milk, half a pint.
9 A.M.	Milk with casein (coffee for flavour), half a pint. Bread and milk, half a pint.
11 A.M.	Benger with casein, half a pint.
1 P.M.	Milk with casein; Bovril, half a pint, or Raw meat, milk, or Raw meat sandwiches, two ounces.
3 P.M.	Egg and milk or thin custard, half a pint.
5 P.M.	Milk tea, half a pint.
7 P.M.	Leube Rosenthal meat solution, quarter tin, or Raw meat, milk, half a pint, or Milk bovril, half a pint, or Milk and arrowroot pancreatised, half a pint.
10 P.M.	Benger with casein, half a pint.
4 A.M.	Milk and egg (with or without alcohol), half a pint.

INFLUENCE OF CHARACTER

Character or temperament, as in all other things, is a very large factor in success. The irresponsible, the undisciplined, and the despondent have nothing like the same chance of recovery as the cautious, the level-headed optimist, and the man of purpose. It is well for a patient to recognise frankly, from the first, that the fight for life and health is to be a hard one, with the odds against him. The next thing to appreciate is, that the adverse odds can be levelled up by learning the principles by which consumption may be cured, and resolutely adhering to them. Indifference to the gravity of the disease and over-anxiety with regard to it are alike bad. Either attitude is calculated to spoil the life of the patient, and distress his friends. Of the two, the happy-go-lucky consumptive, though perhaps the shorter-lived, is a happier man than the discontented hypochondriac. He is certainly a more pleasant companion. The mid-course between these two extremes should be aimed at. The patient who can be careful without being fussy, and can cheerfully, yet with set purpose, follow the lines of life which give him his best chance, is the most likely to achieve success.

In my lectures, I usually point this moral

with a short story ; the facts within my own experience :

Some ten years ago, I chanced to be staying in one of the famous Swiss health resorts. My quarters were in one of the large hotels where consumptives congregate during the winter season to carry out the cure. In those days there were but few sanatoria, and patients were directed in their treatment by the doctors who visited them in their hotels. Amongst the many consumptives with whom I was thrown, four who were friends, in particular, remain in my memory. Three of them were young fellows, cheery and amusing companions, but irresponsible and careless as to the directions of their doctors. One would see them sitting round the lounge fire about six in the afternoon with their thermometers in their mouths. They had a daily amusement in comparing their temperatures, and there was much chaff and joking when one of them was found to be up a bit, perhaps 100° F. or 101° F. Their periods of "doing treatment," as they termed it, were liberally diluted by visits to the billiard-room and card-playing. They were not sufficiently well to be allowed to skate or toboggan, at least to an extent which they considered worth doing.

The fourth member of this party was a man some

ten years senior to the others, a doctor who had broken down and had recently left a busy city practice. A Scotchman, quiet, self-contained and punctilious to a degree as to following his doctor's directions, he was in temperament the opposite of his friends. He lived positively with but one end in view, and this to do the treatment thoroughly. Nothing could tempt him from his set course; the periodic concerts, dances, and other entertainments held in the hotel, even much of the harmless social pleasures, he denied himself. He was a source of considerable amusement, and of a certain amount of admiration. Many could not understand how he could endure such a life. The doctor did extremely well. He is at the present time in perfect health, and a hard-working country practitioner. He has already survived his light-hearted contemporaries by some years.

CHAPTER VI

OCCUPATION

IN view of the immense value of a constant supply of fresh air, it is not surprising to find that consumptives who can manage to secure outdoor employment stand a better chance of recovery than those who must needs work indoors. Those whose natural occupations allow of their being a good deal in the open are clearly fortunate. As examples of such I would instance doctors, veterinary surgeons, and clergy of country districts, chauffeurs, 'bus and tram conductors, and drivers of vehicles generally, also farmers of all descriptions. In the country, too, many business and shop people are a good deal out of doors, going from place to place in connection with their work. For example, auctioneers, estate agents, drapers, provision merchants, &c. People who collect money from house to house, such as agents for insurance companies, &c., live an outdoor life to a very large extent. These several occupations are all suitable. A very large

proportion of consumptives do not belong to a profession or calling which gives them an out-door life. Pulmonary tuberculosis is the disease of the indoor worker. The problem which many patients attempt to solve is how to change an indoor occupation for one of a more open-air character.

The advice to make such a change is given glibly enough. A clerk or business man, for example, is told to become a poultry-farmer or fruit-grower. The mechanic, the artisan, or the factory worker is told to get back to the land. The difficulties in the way of changing an occupation are usually insurmountable. When it is possible, the change usually entails a diminution in income. Married men naturally experience greater difficulty than the unmarried. The young and the single, especially those who are still living at home, can often make a fresh start in life. I am constantly asked as to the possibilities offered by such occupations as farming, fruit or flower growing, poultry-rearing, &c. These occupations all offer ideal employment. For their successful undertaking they require the same conditions as other callings. These conditions are skilled knowledge, hard work, and a certain amount of capital. This is the first and essential fact to be realised. It is absolute folly for any one to embark on any of these pursuits without

the special knowledge or training. This is especially true of the town-bred. The country-born often have some intuitive knowledge and adaptability for country life. Neither can the town labourer, factory worker, nor artisan hope to find remunerative employment on a farm. In these days, the profits from agriculture are cut much too fine to allow of any but experienced labour being employed. A large farmer, within fifty miles of London, recently told me that he had much difficulty in obtaining enough experienced hands for his farms. At the same time he preferred to be short-handed than to complete his staff by engaging the inexperienced. He ridiculed the idea of engaging and training town labour. He would give it a trial if trained first elsewhere. Herein lies the great difficulty—how to give the necessary training to fit the consumptive for a healthy employment. Without some financial resources or philanthropic assistance the patient cannot tide over the necessary period of apprenticeship. Subsidised agricultural colonies might help to solve the problem.

If a patient has a little capital and wants to take up farming, his best course is to take a place on a good farm for some two years. The amount of the premium required may be anything from £50 to £100 or more, depending upon the class of the farm.

This sum will include board and lodging with the farmer. The pupil will give his services in return. He will be taught how to buy and sell; will attend local markets, and learn the general direction of the farm. A course of instruction in an Agricultural College, in addition to the practical training, is an advantage. The capital sum required to take over a farm works out at approximately £10 for every acre.

Small holdings are not very suitable except for the very robust patient. They require heavy work, and do not pay sufficiently well to allow of other labour being employed.

Dairy-farming in the neighbourhood of large towns is profitable, and gives a quicker return on capital than ordinary farming.

Poultry-farming by itself is rarely profitable, unless the proprietor is successful at shows and gets a reputation for particular strains of birds. Under these circumstances he can command inflated prices for his eggs and stock.

The following leading article which appeared in a recent issue of *The Garden* is particularly instructive apropos of my present subject :

GARDENING FOR PROFIT

WORDS OF ADVICE

From time to time letters reach us from persons of both sexes who are seeking information as to the best means of commencing one or more branches of gardening with a view to gaining a living thereby, and during the last few years such letters have increased in numbers considerably. Generally, the writers are evidently keen business people who have managed to save a few hundred pounds in whatever branch of business they may have been trained to, and who, apparently, are possessed of a desire to lead an open-air life. So far the idea is an excellent one, but we need scarcely say that such enthusiasts have never stopped to consider what it means. That a keen business man or woman in some other walk of life should imagine that they can transfer their energies, say, from a grocer's business to that of gardening, of which they are totally ignorant, seems incredulous; yet such is a fact.

Undoubtedly the many erroneous and misleading articles written by theorists in the daily Press on the subject during recent years are largely responsible for this desire on the part of many townfolk to get their living direct from the land, and we fear that

many who have plunged recklessly into some branch of gardening have suffered very considerably. Judging by the letters we receive, the writers have no idea as to what they shall grow or where they shall grow it, and imagine that they only have to dig and plant and Nature will do the rest. How wide this is of the truth all practical men and women will know only too well. It should be sufficient to cause these enthusiasts to seriously consider the matter when we say that we know many hard-working men and women who have devoted their lives, and in some cases long lives, to gardening for profit, and who find it a hard struggle to make both ends meet.

Even with the above facts before them, there are still some novices who are willing to venture in the subject, and it may, perhaps, be of service to point out a few of the difficulties that are likely to be encountered and some of the objects that must be considered. In the first place, capital is absolutely essential; that is, sufficient capital to carry on the work for several years and also to enable the cultivator to live, as returns of any substantial nature cannot be expected for a few years, no matter what crops are grown, as expenses at the commencement must of necessity be heavier than they will be in later years. Another point that we would like to impress

upon the town-dweller who wishes to garden for profit is the long hours of hard work that it will be necessary to put into the business. Up with the lark may sound an alluring prospect during the summer months when skies are blue and Nature is at her best, but the late autumn, winter, and early spring months must also be remembered.

We referred previously to the novice's idea that it is only delving and planting that needs to be done and Nature will do the rest; practical men and women know that Nature is usually apparently trying to do her worst. Frost, cold and boisterous winds, excessive drought or rain, hail, fungoid and insect pests galore, all combine to make the market-gardener's life anything but a bed of roses.

Assuming that the novice still wishes to embark in the enterprise of profit gardening, there are a few hints that may be given, and which will apply to all. We mentioned before that usually such persons as we have in mind have no idea as to what to grow or where to grow it, and this undoubtedly is a very great stumbling-block. For a novice to think of growing produce for the London markets is absurd, and may be dismissed without further thought. What should be done is to find out what is really required in a locality and try to grow produce that

will meet this demand. Generally speaking, better prices can be obtained from provincial towns than in the London markets, and providing the novice has a real love of the work, and is prepared to put several years into it before getting other returns than practical experience, it may be possible to make it pay.

Apart from ordinary gardening, we frequently have inquiries respecting the so-called French system of gardening, which, as many of our readers well know, has been carried on by our best gardeners for many years. In this, again, the daily Press has much to answer for in inducing people to invest their money in such businesses without first securing sound advice upon, and practical experience of, the subject. In considering the advisability of commencing this form of gardening, even the inexperienced man or woman must ask themselves whether there is sufficient demand in the country for such produce as to render the venture a successful one. We think that at present sufficient is being grown to meet the demand, and this is the experience of several who daily have their finger on the pulse of the market. Providing, however, the intending intensive cultivator has convinced himself or herself that there is sufficient demand for produce of this kind, they are at once faced with the enormous expense of commencing the

work. Frames, cloches, manure, mats, baskets, and a host of other apparatus have to be purchased.

Again, to compare the intensive cultivation of France with the same in this country is, to say the least of it, misleading. The French are notoriously a salad-eating nation which, during the cold weather, we are not (and salads form some of the principal crops); the climate of France is more favourable to the work, labour is cheaper there than here, and workmen will work more hours in a day there than they can be induced to do in this country.

Gardening for pleasure, and gardening for a living are two widely different things. It is just as ridiculous for, say, a grocer, draper, stockbroker or clerk to imagine that he can get a living at gardening without previous experience as it would be for a lifelong gardener to attempt to get his living from one of the sources mentioned above.

The kind of advice given in this article might have been written with equal truth with regard to any form of agriculture, fruit-growing, poultry-farming, &c. I have obtained considerable first-hand information from those who are engaged in these callings, and it is always to the same effect "There is undoubtedly a living to be made by the hard worker and the experienced." If a patient has

a taste for a country life, and can afford the training, he is well advised to leave the town for the country.

have
successful
desk
Most patients, after a course of treatment, return to their ordinary occupations. In most cases, this course is the best, if not the only alternative open to them. The consumptive who has an indoor occupation need not be afraid to return to it. To spend the working part of the day indoors is quite compatible with continued good health and ultimate cure. My experience allows of my making this statement quite emphatically. The average clerk, for instance, gives himself a better chance by returning to his office than by becoming a farm labourer, even supposing he obtains the opportunity to make such a change. If he can manage it, however, the clerk employed in the city should exchange to an office in the country or a country town. He should try to do this much. This principle applies to other occupations. Hospital nurses, medical men, and school teachers, for example, can often manage to exchange town for the country without any pecuniary sacrifice.

The nature of the employment to which any patient will return on completion of his course of treatment is of considerable moment to his physician. One of the first questions asked by the patient newly arrived at the sanatorium is: "How long must I

stay?" Before giving an answer, one has to take into consideration the condition of the patient, and the environment and life generally to which he will in due course return. Things being equal from a medical point of view, the patient who will go back to very favourable conditions at home and at his work need not stay in the sanatorium so long as one who is less fortunately situated. It will best pay the consumptive who must follow a somewhat unhealthy occupation to devote a considerable time to his cure. He should not leave off his strict treatment until the cure is well advanced. This may well be a matter of from six to twelve months. The patient whose life will be of a more healthy character can afford to compromise. He may safely leave the strict discipline of the sanatorium with his disease in a less advanced state of cure. Some four to six months devoted entirely to treatment are often sufficient for him. Those who rely on manual labour for their living have a better chance of standing the wear and tear of life if they remain long enough under treatment to be restored to a real capacity for their work. The only reliable test for a capacity for manual work is to have actually done it without ill effect. This standard is aimed at in many of the sanatoria for the working classes.

Sometimes a course of action one thinks to be best cannot be followed. The patient cannot perhaps afford the time or the money for an adequate length of treatment. The best must be made of the circumstances. To lose heart is fatal. If the difficulties are squarely faced, much can be accomplished. The patient who is bound to return to work with his cure far from complete must, by careful thought, make his life as healthy as possible. He will avoid irregular hours, hurried meals, over-exertion, &c. His life, when he is away from his work, will be exemplary from the point of view of treatment. Very often a man can keep his business going, and at the same time safeguard his health by at first working shorter hours, or perhaps on a few days of the week only. I have many times seen this plan prove most successful. The temporary sacrifice of income must be looked upon as an investment, and as a very sound one. It is in these matters that the consumptive, above all perhaps, requires experienced advice to know how much to risk and what risks are probably associated with several possible courses of action. Patients are wise to describe their circumstances fully to their doctors. It is only by so doing that they can hope to receive the best advice.

SCHOOL OF MEDICINE
UNIVERSITY OF LEEDS.

CHAPTER VII

EMIGRATION

A VERY large number of consumptives, at some time or another, are advised to emigrate. The adviser, usually some friend, or perhaps a medical man, rarely has any practical knowledge of the prospects offered to the consumptive by going abroad. The information he has to impart is vague; very frequently a mere general statement to the effect that South Africa or Colorado are the best places for any consumptive. "That is the climate I should go to if I had weak lungs," &c. &c. Many a consumptive has lived bitterly to regret having acted upon well-intentioned statements such as these. The following letter from a former patient of mine who was persuaded to go to South Africa is an example of the disillusioning of the hopeful emigrant. "My return from South Africa must speak for itself. You must know that I have been disappointed. Now I realise fully that climate is nothing without proper treat-

ment, and I determined to write and tell you this as soon as I landed. In Africa I simply could not eat. However, now I have given South Africa a trial, I can stay at home more contentedly. I may say I am already feeling better now that I am in England again." Another letter from the relatives of a school-teacher, who also emigrated to South Africa, tells a similar tale. "Miss —— died at Modder River. When she came home from the sanatorium she was wonderfully well and in good spirits. She was determined to leave this country and go out as a teacher to South Africa. We all thought that it would be good for her, but we shall always regret the step. She got a very fine appointment in a school at Cape Town, but was advised to go up country. She then settled in Modder River. She was very home-sick, and found the heat unbearable."

The histories of these two patients by themselves do not by any means give a fair index of my experience of emigration. I have many records which show the great success which may follow the settling in a new country. I must emphasise the point, however, that emigration is not calculated to be satisfactory unless the intending emigrant has received competent advice as to the advisability of going abroad. The pros and cons should be thoroughly

appreciated before a decision to leave this country is arrived at.

The following information which I have received from former patients now settled in various places abroad will, I think, be of some value to any one who has thoughts of emigrating. The various reports have for the most part been sent to me in answer to the following list of questions :

1. What opportunities does your new country offer for clerks, school-teachers, professional men, or the working classes ?

2. What opportunity is there for a man to take up farming or some outdoor work without previous knowledge of the same, or without capital ?

3. Is living expensive or otherwise, and is good housing accommodation easily obtainable ?

4. Is work of any kind easy to obtain by any one with a fair education who would be willing to take what he could get ?

5. Is it advisable to go out without introductions to anybody already in the colony ?

6. Is your climate better than the English climate ?

7. In your own case, do you think you have gained by emigrating, and would you advise others to emigrate?

8. Finally, what advice would you now give to any patient deciding to emigrate to your colony?

CANADA : BRITISH COLUMBIA

1. "There is plenty of room for clerks, none at all for school-teachers. There are good openings for doctors in small towns, say of 2000 people, and any amount of work for the working classes. Such people as myself come under this head when we want jobs, as the working classes get the best of pay. Any man can get $2\frac{1}{2}$ dollars a day (a dollar is equivalent to 4*s.* 2*d.*) for pick and shovel work. Painters get 5 dollars a day and carpenters 3 dollars a day. A man can live comfortably on from $2\frac{1}{2}$ to 4 dollars a week. There is no finer country than this for a man who is willing to work. The worker is not looked down upon as he is in England, because he is the man who is making Canada what she is to-day."

2. "With regard to the prospects of farming: There is no chance for a man to get on as a farmer

without capital; it is utterly impossible. A man out here works until he gets enough money to pay for his land and house; he then works his little garden, keeps a cow and a few hens. When a man buys his house it is his own look out. I went up 4000 feet, 8 miles from the nearest person, and staked my 150 acres, but I left it because of my lack of capital. Any fool can get a job (I have) on a ranch at 20 dollars a month with board, but the hours are from 5 A.M. to 6 P.M. every day of the year. Be sure and see that your rancher can harness a team of horses before he sails for Canada, because we English are disliked and laughed at out here because we know nothing. I would not suggest ranching or working for some one else on a ranch, because we lungers cannot stand the early hours nor the dust off the land."

3. "*Re* expense of living. The smallest wage any one can get in an office is 50 dollars a month. A man can live cheaply in the West, for instance, for 25 dollars a month in an hotel. What we single men usually do is to get three or four young fellows together and live and do our own cooking in a shack or cabin. You can live thus for 2½ dollars a week per head, and you can always hire a house or a cabin

for 6 dollars a month. This is what I am doing. Tell your patients how to cook and make bread before they come out to Canada."

4. "*Re* the possibility of obtaining work. Most decidedly, a man with or without education can always get a job if he is willing to work."

5. "*Re* introductions. Introductions are not wanted out here unless you are a professional man or a civil engineer. Employers out here do not want introductions; they want you. They can soon see if you can work, and if you can't or won't, they have no further use for you."

6. "As regards climate. The climate of Western Canada is magnificent. Lungers should come out to the West, not to the East. The East is too severe in winter. Don't go to Vancouver, because it is too wet. Go no farther west than the Rockies, for instance, Revelstoke."

7. "Personally I have gained by coming out here. I am right in the Rockies, 2580 feet above sea-level."

8. "As to advice to anybody emigrating. This is difficult to give. Don't tell any one out here that you are English. If you decide on farming, learn

how to harness up a team of horses. Learn to cook, and to make bread. Learn how not to be proud, but willing to clean out a sewer if you are told to. Don't 'Sir' any one out here, but treat your boss in the same way as you treat your brother. Be independent, pretend not to care two straws whether you get a job or not. Remember that out in Canada you with 2 cents are as good as your boss with his thousands of dollars. Don't be afraid to let him know this, but at the same time be willing to do anything. Trade comes first out here, and the man with a trade has absolutely no difficulty in getting work, whether he is English or not. Carpentering pays well. There are also plenty of jobs for shorthand and typewriting clerks in the larger towns. To sum up the West, it is muscle and not education that is wanted."

The writer of this letter was formerly a clerk in a London office.

CANADA : LETHBRIDGE, ALBERTA

"Regarding your inquiries concerning the advantages of this country and climate, we might say that it is considered by the medical profession here to be especially beneficial for lung trouble, but the country

being new, the price of living is very high, and it is exceedingly difficult for any one without capital, particularly if in a delicate state of health, to make a living. School-teachers are in demand, but salaries in comparison with the cost of living are low. Clerks are better paid on the average than school-teachers, and it should not be difficult for any one with a reasonable education and health to secure a position, providing he is willing to adapt himself to the conditions of the country. There is still land to be had for farming, but it is very uphill work without a capital of from a thousand to fifteen hundred dollars. The climate is very dry, the altitude high, and the winters are severe."

CANADA: NORTH-WEST

"The demand for skilled labour in Canada at the present time is limited. There are more openings for school-teachers. Clerks and business men generally have as much difficulty in obtaining work in Canada as they have in England. This is due to the tendency of emigrants to flock to the towns instead of going into the country. The demand for school-teachers exceeds the supply, but to obtain a post in Canada, a teacher must have a Canadian

certificate or a permit from the Government. Carpenters, bricklayers, plumbers, and mechanics can find ample work during the summer season, which lasts about seven months. Outdoor work of all kinds in the towns and cities terminates with the coming of the frost in November.

“There is every opportunity for a willing and steady man to get work on a farm in Canada, more particularly in Western Canada, whether he be experienced or not, as there is an ever-increasing demand for farm hands. The inexperienced emigrant should hire for twelve months with a Canadian farmer. He can usually do this, and get a wage equal to ten dollars a month with board and lodging. In this way he can get a thorough knowledge of Canadian methods of farming. Capital under these circumstances is of course unnecessary.

“It costs more to live in Canada than at home, but the wages are higher, and, on the whole, a man is better off out here. House accommodation on the whole is good, but there is a great tendency to sacrifice ventilation to secure warmth.

“The man who can turn his hand to anything need never fear unemployment at any time of the year. If, for instance, the work of his particular trade finishes on the approach of winter, he could

then leave his skilled work and undertake unskilled and rougher work. He could find employment in the lumber camps, construction camps, and on surveying staffs. This class of work is mostly carried out in the winter.

“Introductions are not necessary in Canada. The Canadian Government gives information and assistance through labour and information bureaux which are to be found in all towns and cities. The Government have also provided buildings in all large towns and cities to give temporary accommodation to immigrants.

“The Canadian climate is undoubtedly superior to that of England. The summer and winter are certainly accompanied at times by extreme temperatures, but, on account of the dryness of the atmosphere, they are not felt.

“Speaking personally, I must say that my experience in Canada, though rough, has been most satisfactory. I now hold a Government appointment as a farm instructor to the North-West Indians.”

I am indebted to Dr. E. Carling, Medical Superintendent of Peppard Common Sanatorium, for this report. The writer, who was formerly a patient under her care, has kindly sent me the following additional information :

“With regard to my experience of agriculture before emigrating to Canada, I may say that, apart from a little knowledge of horses, I was quite inexperienced.

“For nearly two years I was a school-teacher in a large town in Staffordshire. Deciding to undertake physical work of some description, I determined to emigrate to Canada, which I did in 1904.

“I engaged with farmers there who were recognised as being some of the most scientific and up-to-date in the country, and, by changing from one farmer to another engaged in different branches of agriculture, I had, at the end of three years, a good all-round practical experience.

“With this experience and a certain amount of theoretical knowledge obtained at the Winnipeg Agricultural College, I applied for the Government position I now hold. I attended college for one winter term of three months (the cost being about £1 a week inclusive) and the appointment was granted on the understanding that I should complete my work at the Agricultural College during the next two winters.”

UNITED STATES OF AMERICA :
CALIFORNIA

1. "With regard to the opportunities for clerks, school-teachers, professional men, and working classes. There are, practically speaking, no opportunities for the ordinary clerk unless he can prove that he is an expert book-keeper and shorthand typist. An English school-teacher would find it hard to get work, as the system of education in America is so different to that in England. Professional men have a good chance of employment if they are willing to adopt American methods. The working classes can always get jobs such as bricklaying, carpentering, &c., on condition that they join the union."

2. "Farming. The only chance a man has who wants to farm is to go out and work on a good farm even if he only gets board and lodging. Farming methods, except in the culture of fruits, are much cruder than in England, so that a man working for board and lodging on a western farm will soon pick up the general run of things. The consumptive must remember that though a day's farming consists of nine hours' work, these nine hours must be actually spent in the field. Before and after this nine hours

begins and ends a man must clean stables and horses, feed the same and also all the other live stock on the farm. To do this he must be up at 5 A.M. Capital is almost essential."

3. "Living is much more expensive in California than in England. Housing accommodation is plentiful, but rents are high. Although the actual cost of living is higher than in England, one can cut down one's expenses a good deal, and one has not to keep up any position. Servants are hard to get, are unsatisfactory, and demand very high wages, so that most of the better class people do without them. Maids get about thirty dollars (£6) a month, all found."

4. "Generally speaking work is easy to obtain by any one with a fair education, but I would not advise any one to emigrate to California unless he has some profession or trade."

5. "It is very unwise to go out without introductions."

6. "Climate. The climate is very varied all over California. On the coast it is comfortably warm in summer and rarely cold in winter. Away from the coast it is very warm and the temperature is often up to 105° in the shade. It is of course very dry,

so that one stands this temperature better than 85° in the shade on the coast, where it is humid. Winter in the black country is cold.”

8. “I would not advise any patient to emigrate to California unless he has a good introduction, has been guaranteed a job, or has some capital. For years consumptives have been coming out here, and many eventually have to be kept by the rates; the consumptive then is not looked upon with anything like favour.”

This report is given to me by a patient who has spent some fifteen years on a Californian fruit ranch.

CALIFORNIA

I am indebted to Dr. Evans of San Francisco for this further information with regard to the prospects of work in California.

“It is certainly useless to send tuberculous people here unless they have some means of sustenance, sufficient to tide them over until they can find work suitable to their condition. We have a climate which lacks the rigorous qualities of the eastern States or even of England. We have a host of our own people who are looking for the “soft jobs”

which the arrested tuberculous patient tries to get. These positions are at a premium everywhere. The failure of these people to find employment is pathetically told by the fact that in Los Angeles, where large numbers of such sufferers go, the annual death-rate from pulmonary tuberculosis is 518 per hundred thousand population, a small minority of which are natives of California. On the other hand, the opportunity open for colonists in California is magnificent. The individual of moderate means whose physical condition is such that he can actively take on the duties of colonisation can, I believe, find no better opportunity than out here."

SOUTH AMERICA : BUENOS AIRES

1. "Opportunities for work. As far as I can see, this country offers good employment for clerks, professional men, and the working classes. It is very important that any one coming to this country should have some knowledge of the Spanish language; if he has not this knowledge his chances of employment are small. With regard to teachers, I am not sure, but I should think that there is a good field for them, especially if they are equipped with two or more languages. The working class here

consists chiefly of Italians, Spaniards, French, and Germans, although there are a good many British working men employed in the northern provinces."

2. "With regard to farming. It is possible for a young fellow to get employment on the camps out here. For this one has to be very strong, and prepared to work very hard for very little pay. This, in short, is healthy but not very remunerative employment. To start a farm, a man would want a fair amount of capital."

3. "Living out here, especially in Buenos Aires and in the northern provinces, is very expensive. To live at all comfortably in Buenos Aires a single man has to pay about ten guineas a month for partial board and lodging. Trams are very cheap, but practically everything else costs twice as much here as it does at home. Housing accommodation is good."

4. "As to obtaining work. Providing one has a good knowledge of Spanish and is fairly well educated, I do not think it would be difficult to find employment. If any one is left in Buenos Aires without position or money, he is in as bad a place as he can be."

5. “*Re* introductions. It is risky for any one to come out here without having a post or friends in the country. This is especially the case if he is not strong. In this country doctors are very expensive, and a sick man is much worse off than he is in England.”

6. “In my opinion the climate out here is better than the English climate. For one thing one can depend on about nine months’ good weather during the year, with plenty of sunshine. The winter is not so cold as at home, and there are no fogs. One has to be careful, however, because in the morning and evening it is generally much colder than at midday.”

7. “I think I have gained by coming to this country, as I am keeping very well. An Englishman in this country does not have the comforts that he generally can get at home; in view of this it is a question whether it is advisable to come out if not over strong.”

The writer of the above is a clerk formerly engaged in a city office.

SOUTH AFRICA: ORANGE RIVER COLONY

1. "*Re* openings for employment. At present the prospect for teachers in the Orange River Colony is not of the brightest. The grant of responsible government in 1907 led to a declaration of the equality of the Dutch and English languages. As a result all applicants for posts under the Government in the elementary or secondary schools must be qualified to teach in both languages. In the Transvaal, Dutch is not absolutely compulsory, but Dutch is desirable. Here Dutch is essential. English teachers already in the colonies have been given three years in which to qualify, but their tenure of office is uncertain. Clerks labour under the same disadvantages, though perhaps not to such a great degree except in the Civil Service. In this service English clerks are being superseded by Hollanders or Africanders. In a few private firms and on the railway it is still possible to obtain a post without the knowledge of Dutch, but these posts are few. There is a splendid opening for doctors in any part of South Africa, but especially so in the country districts where it is possible to combine farming with the work of healing. This is done, for instance, by a local doctor, who seems to make a success of both. Another plan is to become

a visiting doctor, viz., one who sees his patients at different places on different days of the week. This necessitates hours spent in the open air, riding or driving. Lastly, there is a splendid opening for any one who will open a sanatorium. Any of the towns on the eastern border at the foot of the Drakensbergen would make an admirable site. There is a so-called sanatorium at Kimberley, but it is merely an hotel. Lawyers would not find it easy to work up a practice unless they could become associated with some firm of long standing and were thoroughly conversant with the Roman-Dutch as well as the English law. This profession too is overcrowded. Music teachers are at a discount. Skilled artisans can almost invariably obtain work on the railways, at the railway works and on the mines. The pay is exceedingly good, averaging in the Orange River Colony about £30 a month, and in the Transvaal even higher. Builders and joiners are in demand in the Transvaal, but not so much in this colony."

2. "With regard to farming. Farming is of all callings the one I can recommend to your patients with the greatest confidence. Almost every one in the colony is connected with it in some way. A man must have capital to begin with, and the smallest

amount of any use is from £500 to £600. This is a larger sum than is required in Canada. Here there are no free grants of land, and all farm implements are dear, but the return on the capital is proportionately greater than in Canada. The return on sheep is 50 per cent., on stock 25 per cent., and granted a good season without drought or locusts the yield in crops is enormous. I would not advise a patient to rent a farm immediately on his arrival. The better plan is to go as a boarder (£5 a month) with some good farmer for six or eight months to learn the methods of the colony. Then he should be guided by the advice of the old settlers before taking a farm. He will find that they are willing to help the inexperienced, and that they will ride any distance to look over a farm or purchase stock for a beginner. They are always very good in giving advice, so that it is possible for a man with no previous experience of farming to make a success of it. If your patients could get Government farms it would be the best thing possible, as the rents are low and every year great improvements are made. Government farms, however, are very scarce. It is best to write to the Land Settlement Board for full particulars. Apart from farming there is very little out-door employment. There used to be a good field for commercial travel-

lers, but with the opening up of railways, they now find a difficulty in making an income."

3. "With regard to living. Living is moderately dear. In towns board-residence costs from £7 to £10 a month; in the country about £5 a month. House-rent varies considerably. Artisans' dwellings may be obtained at £3 a month, but a moderate-sized villa would have a rental of £6 to £10 a month plus light and water rates. Food is about 20 per cent. dearer than in England, but labour is cheaper, a Kaffir house-servant working for a pound to twenty-five shillings a month in town, and ten shillings a month in the country."

4. "It is not easy to obtain general work, as in many colonies. The work that is usually sought by men who are anxious to do something, no matter what, is done by the Kaffirs. All unskilled labour, portorage, &c., is done by them. On farms, too, all the hard work is done by the Kaffirs, the farmers organising, superintending, and helping at the busy times. It is almost useless for a white man to look for work on a farm, hoping to earn sufficient in time to start work for himself. The farmers do not want white help."

5. "It is not advisable for any one to come out to Africa without introductions. The sometimes hopeless search for work is heartbreaking even to the strongest. Five years ago, it would have been possible for a stranger with more or less good credentials easily to obtain a post. Nowadays a man or a girl coming to this colony or to the Transvaal with the best qualifications, but knowing no one, may wait months before obtaining a post."

6. "Climate. The climate in this colony is certainly better than that of England for consumptives, inasmuch as it is drier and sunnier. There are no fogs, very few wet days, and almost endless sunshine. The result is one lives almost entirely in the open air; doors and windows are always open, and hours are spent on the verandah that would otherwise be spent indoors. There is only one drawback, and that is the dust-storms which are prevalent in August and September. Here the air is so exhilarating that one can work with energy or ride for miles without fatigue. Walking is out of the question, as the roads are so dusty. The winter climate is ideal."

7. "Personally I think I have gained by coming to South Africa. I have practically had no illness

since I left England. With the present state of affairs, I would advise patients to wait another year before they decide to come 'out. The country is in a state of transition, but with the proclamation of union next May, there may be a prospect of better things."

8. "There are a few other points. The emigrant should time his arrival in Africa for October or November. This avoids the winds of August and September, and allows of the patient becoming gradually accustomed to the heat before it becomes intense. The country, too, is looking its best, a great factor in warding off home-sickness. As their first stopping-place, I would strongly advise patients to avoid the coast and Rand towns. In all of the former there are bad winds; in Cape Town it is the south-east and in Port Elizabeth south-west, while Durban, with its sub-tropical climate, is so enervating. The Rand towns are even worse, for the air is impregnated with fine dust from the mines. This is unfortunate, as these towns offer the best advantages from the financial standpoint.

"Pretoria lies in a hollow and has a humid climate, so that too is bad. The towns on the uplands of Cape Colony, Natal, and the Orange River Colony

are all healthy. Patients with any heart weakness should not come to the high veldt immediately after landing. A short stay on the low Karroo followed by another stay at a higher altitude should precede the settlement on the uplands.

“As regards clothing. A good stock should be brought out, as prices are from 25 to 50 per cent. higher than in England. While plenty of light summer garments should be brought, warm clothing must not be forgotten, as the winters are often very cold. A long thick coat for driving is a necessity, and a rubber hot-water bottle is almost equally so. Woollen underclothing should always be worn, as there is a certain drop in temperature at sunset.

“Lastly, people who come out must be prepared to make the best of the conditions prevailing. Nothing annoys colonials more than to hear newcomers compare the colony to England, to the disparagement of the former. Those who are willing to accept the country as it is and to do their fair share towards developing it are given a warm welcome.”

This report is from a teacher, formerly employed in a London County Council school.

SOUTH AFRICA : NATAL

1. "*Re* opportunities for work. This country offers absolutely no openings at all for either clerks or working men. There is a good opening for professional men, such as doctors and chemists. For schoolmasters it offers many opportunities in Natal, provided that they are really well certificated. This only applies to Natal. It is useless for them to go to the other countries, as Dutch is required there. There is a good opening for working men who are skilled electricians."

2. "Farming. There is practically no opportunity for inexperienced men to come out here and take up farming without capital. In the first place, farming out here is very difficult, even for the most experienced. All the labour out here is black, and any man who wishes to work on a farm must know the Kaffir language. Without this language he is no use at all. There are many men already here who have been born in the country and know the language, but find it difficult to get a job. The necessary capital to start a farm I should put down as at least £500."

3. "Living. Living is not particularly expensive, averaging, generally speaking, some 10 per cent.

more in cost than at home. The following are some of the present prices from to-day's market list:

“Butter, 1s. 9d. per lb. Milk, 4d. a pint bottle. Eggs, 10d. to 1s. 3d. per dozen. Potatoes, 1d. to 1½d. per lb. Bread, 5d. a loaf. Cauliflower, 3d. to 6d. each.

“Clothing is very dear, and a decent pair of boots cost at least 25s. Good house accommodation is only available in towns such as Durban, Maritzburg, Ladysmith, &c. In a place like this (Estcourt) it is fairly good, but very expensive and hard to obtain. The rent is £36 a year for a house with four rooms.”

4. “*Re* work generally. It is distinctly difficult to obtain work unless one is skilled in some department. All the ordinary manual labour is done by natives. The servants, waiters, and cooks in hotels and houses belong to the class of imported Indian coolie.”

5. “Introductions. People are extremely ill-advised to come out here without introductions.”

6. “The climate is absolutely perfect, 50 per cent. better than the home climate. Up the country the heat is never oppressive.”

7. "I think I have distinctly gained by emigration, both in health and in prospects. I should advise other patients to come here if they have a definite situation offered to them. On no account come out without such an offer. For any one with a profession, however, there is practically no difficulty about getting work."

8. "My advice to the would-be colonist to Natal is as follows :

"Get definite employment before you leave England.

"Don't on any account take a position in any of the coast towns such as Durban, or within twenty miles of the coast. If a consumptive settles there he dies.

"Don't come out unless you are fit to work.

"On no account go to Johannesburg or Kimberley.

"Bring out plenty of clothes, both for warm and cold weather.

"Finally, I should say that I am very well indeed, and have not had a single day's illness since I came out."

The patient who sends this report was formerly a master in an English private school.

SOUTH AFRICA : TRANSVAAL

“Competition in every class of trade or profession is as keen here (Johannesburg) as it is at home. This country offers no opportunities for clerks, school-teachers, or professional men unless they have influence. It is a well-known fact that employers would rather take on a man who has had some experience in this country than one fresh from over the water. The conditions on this side are very different and want getting used to.

“With regard to farming, I have not had much experience amongst the farming classes, but from what I can gather, what I have already said about other occupations applies to farming.

“Wages are good, but expenses more than counter-balance this. Food is not so expensive, but house rents are very high.

“It is not easy to obtain work of any description. All the same, if I had to start afresh, I would certainly choose South Africa rather than England. The conditions here are by no means settled, and opportunities occur for forwarding oneself more often than they do in England.

“Every one that comes here should have an introduction; and unless that person has the necessary

influence, he will not be able to give much help.

“Our climate is decidedly better than the English climate. It is very much drier, and you invariably wake up with the sun shining overhead. This alone makes one feel better and brighter. I feel no doubt that the climate has had a lot to do with my recovery.

“To sum up, although work of all descriptions is hard to get here the country certainly offers opportunities. The climate too is worth coming out for. It is not wise for any one to come out unless he has a billet to go to. Failing a definite post, the emigrant should have enough money to keep him for six months after landing, and enough to take him home again. Without these provisions, they are more than likely to be stranded, and certainly should not come to this country.”

This report is from a former patient who was born and brought up in South Africa. He was found to be suffering from pulmonary tuberculosis when on a visit to England in 1906. He had a course of sanatorium treatment before returning to South Africa.

SOUTH AFRICA: NATAL

1. "The opportunities which this country offers for clerks are very poor. School-teachers I imagine stand a better chance. They can sometimes get a private post on a farm; in some cases the children of neighbouring farmers join and make up a small class. The pay would be small, but board would be free, and of course the life is healthy. There are openings for professional men. With regard to the working classes, if a man has a trade and is good at it he ought to get on well. He will require a little money in hand to live on until he finds work. The man with no trade is absolutely of no use out here."

2. "Farming. This is, of all, the life for the man with a weak chest. It is necessary, however, to have a few hundred pounds' capital to start with. Also, a man before he starts on his own must work on a farm for some one else for two or three years. He cannot get the necessary experience any other way. Experience of English farming is of very little value. It is a grand healthy life, and however small the wages, one can jog along. Unless a man has capital, he has little chance of ever doing much good. There are hundreds of men out here without capital who

are only too keen to get on to a farm for what we should call a Kaffir wage."

3. "Living is much more expensive out here than at home, probably as much again, but all wages are higher."

4. "It is not easy to obtain work of any kind in this colony."

5. "I would advise no one to come out here without introductions."

6. "There is no question whatever as to the climate being much finer than in England.

"If a man has a little capital and is prepared to do hard manual work I would advise him to come out here and take up farming. He won't make much, but he can make a living."

7. "Before he leaves England he should put in a month's work in a blacksmith's shop, and another month in a carpenter's shop.

"If a man is not prepared to work harder than he has ever done at home, he had better not come out."

The writer of this report has been in the colony for five years. Before he emigrated he was in a corn-merchant's business in a country town.

NEW ZEALAND

1. "At the present moment the opportunities for all classes with the exception of those with a knowledge of farming are by no means brilliant, and there are plenty of men on the unemployed list ready to fill any vacancies that may occur."

2. "*Re* farming. Farming requires capital, and even when a man has the money it is best for him to get work on a farm in order to learn the methods of the country."

3. "*Re* living. For the single man, board and lodging can be obtained for 20*s.* per week and upwards. In some of the bigger towns, house rent is fairly high, especially in Wellington, and the married man with a family may have to pay 25*s.* a week for a house with four rooms. Provisions are rather dearer than at home, clothing about 25 per cent. dearer, and medical attention and medicine much higher."

4. "*Re* prospect of work generally. At the present time, there is considerable unemployment in all trades and professions, so this is not a suitable time for emigrating. You must also remember that consumptives are not allowed to land in New Zealand.

They manage to get in now and again by travelling first class, but frequently cases are not allowed to land and have to return to England. In my opinion openings for work in New Zealand are scarce."

5. "Introductions are useful but not essential."

6. "The climate in New Zealand is somewhat similar in character to the English climate, but has much more sunshine. It possesses a considerable variety; Auckland is inclined to be warm, and Dunedin inclined to be cold. There is a good deal of rain in the south, and in the winter snow falls regularly."

7. "I am not sure whether I have gained by emigrating. My feeling is that if a man has been pronounced practically cured and can take up work without much risk of relapse he is well advised to come out. At the present time, however, he would require to have a little capital, as owing to the depression in trade, it might take him some time to find work."

8. "I would advise an emigrant to New Zealand to make for Wellington in the first place, and to have a look round before making a move. The

New Zealand Government has a labour department, which is always able to advise as to possible openings."

The writer of this report was formerly a clerk in a city office.

NEW ZEALAND

Letter from a patient in Patoka, Hawke's Bay.

"Clerks, teachers, professional men, and artisans are advised not to emigrate, as the supply in the Colony, in these respects, is equal to the demand.

"There are no openings for farming unless you have capital, practical knowledge, or good introductions.

"Living is expensive. An adaptable man should be able to obtain work of some sort, but introductions will help him.

"The climate is better than in England. The east coast and the North Island is preferable to the west, as it is drier. The South Island climate is much like that in England.

"My advice to the intending emigrant is—come to the east coast, get a job in the country, and be prepared to rough it.

"When I first arrived, I was fortunate enough through an introduction to get a job at rabbit poisoning. This meant walking between ten and

fifteen miles a day over rough country, and with not the best of food, but it proved very beneficial to my health. I was in the country—60 miles from Napier at an elevation of some 5000 feet. I next got a job at the Napier Golf Club digging bunkers and carting. This I found very hard work. I am now engaged on a sheep station of 3000 acres, carrying about 2500 sheep. I am getting small wages on account of my lack of experience. I am very comfortable and get good food. My routine is as follows :

“Up at 6 A.M., milk cows. Breakfast at 7. At 7.30 ride round the sheep; this takes 4 hours. Dinner 12 till 1. In the afternoon various jobs. For the last week it has been scrub-cutting; this is the hardest work I have had to do, so far, on the farm. At 4 o'clock we milk again, feed the calves, and fill in the time till 6. I go to bed at 8.

“On Sundays we milk, and ride round the sheep.

“With regard to house accommodation. In the country a man has a hut, and he usually makes his own bed with a few boards and a sack of hay or chaff. He finds his own blankets.”

The writer of this letter was formerly a clerk employed in a London office.

AUSTRALIA : NEW SOUTH WALES

1. “*Re* the prospects of work. (a) Professional. There are splendid opportunities for medical men. Practices are cheap to buy (a third to a quarter of a year’s purchase). There are plenty of good openings, and *locum tenens* are always wanted at about six guineas a week. I think that there are plenty of the smaller towns in which solicitors would do well, but I do not know what special training or examinations are necessary.

“(b) School teachers. Practically all the schools are State schools. I think that a man with a certain amount of capital would do well with a private school in some of the inland townships. Apart from this, I do not think that there are many openings. Female teachers, on the other hand, can readily get private work in a station where the life would be easy and healthy.

“(c) Clerks can find employment after a short time much more easily than in England, provided they are not limited to any definite branch of work, and will take anything. Numbers of stations now employ book-keepers, a very suitable post for a consumptive, and not difficult to get with a little influence, or introductions.

“(d) Working classes. There is always a large demand for men on the stations. Grooms, gardeners, and men with trades can easily get employment. Ordinary station life, however, is pretty hard for a man if not in health. Working women, cooks, domestic servants, nurses, &c., can take their choice of places, as the demand for them far exceeds the supply.

“(e) Professional nurses. There is plenty of work for nurses either in private work in connection with the nurses’ homes or in hospitals. With a little capital to start with, a nurse could run a small nursing home (especially if she had a midwifery training as well) in numbers of the smaller inland towns with a fair profit.”

2. “Farming. It would be fatal for a man to start farming on his own without previous experience. The conditions are quite different out here to what they are at home. Much the best plan is to work on a station for a time before taking on any land.”

3. “The necessities of life are not very expensive; meat, for instance, is cheap. Luxuries are expensive. Good accommodation can be got at hotels from 30s.

a week. Houses are good, mostly of wood with corrugated iron roof."

4. "People with a fair education but with no definite trade or profession would find it difficult to find employment. I think, however, that any one with ordinary intelligence and perseverance should be able to get work, provided he is really willing to take advantage of any reasonable offer."

5. "Introductions certainly help the new man and always lead to other introductions in whatever direction that man may want to go. England is the worst place in which to hear of genuine good openings here. It is much better to wait until you are on the spot before undertaking any post."

6. "The climate is undoubtedly far better here than in England provided that the right part is chosen. Roughly speaking, the farther inland, the drier is the climate, and hence healthier for consumptives. A hundred miles or so inland, in South Australia, Victoria, New South Wales, and parts of Queensland, you find much the same climate. Rainfall, 15 inches and upwards. Summer, hot but dry. Winter quite pleasant. Outdoor life is perfectly comfortable throughout the year. No fogs. Day

after day absolutely cloudless. The climate of Tasmania is like that of England. It is ideal in summer, but too cold and damp in the winter. Tasmania also offers poor opportunities for work."

7. "In my own case, emigration was the best step I could possibly have taken. I like the life, the people, the climate, and the freedom. I have a better prospect both for my health and for my profession. I don't suppose I shall ever live in England again.

"On the whole I should advise young patients with early lung disease to come out here. I think it gives them their best chance of curing and working at the same time. There is not much chance for old people to find work, but they, too, find an open-air life during the whole year much more comfortable than in England."

8. "Finally, don't stop near the coast when you come out. Go well inland at once.

"The best opportunities are in the smaller towns and their neighbourhood. Do not on any account enter into any agreement or undertaking in England; in fact, until you are on the spot and thoroughly understand the local conditions.

“Don't speak of having tuberculosis, as there is a great prejudice against it.”

This very interesting report is from a young medical man who contracted consumption soon after he qualified.

AUSTRALIA : NEW SOUTH WALES

“I think that patients who have sufficiently recovered to be able to come out to this country and rough it a bit ought to do well on farms or sheep stations. Any one who wishes to start farming out here should gain his experience by working on a farm for a year or two, even if he does not make a living wage. The emigrant has a lot to learn ; he has to work with instruments which he probably never saw before, such as a long-handled axe, shovel, and crow-bar. He should also know something of carpenter's work, be able to use butcher's knives, and above all to ride a horse. Personally, I found I had most of these things to learn. The life out here is not really hard, taking all things into consideration. In dairy-farming one has to be up at three or four in the morning, but this finishes at nine, so one can sleep till three in the afternoon, when another start is made. The hours are better on a big farm. The man who

can farm at home will soon learn to farm out here and will make money. The man who does not care to rough it had best stay at home. There are, of course, no theatres, music halls, &c., but on the other hand the air is as fine and pure as a man could want.

“One word more—the worst thing for a new-comer to do is to start and run the country down.”

This former patient, once a clerk in a city office, has been in the colony for some six years. He was born and brought up in the country (Scotland).

There seems to be little doubt that some countries and colonies offer great advantages to the consumptive, from a climatic point of view. The continued sunshine, the dryness, exhilarating air, and the freedom from mists and frequent rain, conditions which allow of living out of doors all the year round without discomfort; all these are great assets. The best climate and the best place for the consumptive are those in which he can most readily live an outdoor life. South Africa, Australia, New Zealand, and Canada offer considerable climatic advantages. The country with an ideal climate is, however, of no use to the consumptive emigrant unless he can find work to do

when he gets there. Herein lies the difficulty. In many colonies, to live in the towns is to discount greatly the value of the change of country. The best occupation to follow is that of farming. This is rough work, however, and suited to but few individuals. To do any real good as a farmer, capital of several hundred pounds appears to be necessary. Some degree of practical training and, to a lesser extent, introductions are further essentials. To the consumptive with the requisite ability, training, and capital, farming in one of the British colonies is certainly to be recommended as a career. It is, of course, going too far to say that a man cannot succeed without capital, training, or introductions. There are some who, as it is termed, always find their feet. They can readily adapt themselves to circumstances, will turn their hand to anything, are enterprising, and, generally speaking, can look after themselves. This is a type which, even though handicapped, makes the successful colonist. The intending emigrant, who possesses neither these qualifications nor capital, had better reconsider his decision to leave his own country.

CHAPTER VIII

INFECTION, DISINFECTION, ETC.

DISPOSAL OF SPUTUM. The principal source of infection of tuberculosis is the sputum from consumptive patients. This becomes dry; the bacilli are then liberated and pass into the atmosphere as dust. They can thus be taken into the body with the air that is breathed. In all probability the majority of consumptives contract the disease in this way. Tubercle bacilli outside the body, though they do not multiply, may retain their vitality for many months. Sputum, so long as it is moist, is not dangerous. If all expectoration is collected and destroyed, the gravest danger of spreading the disease is got rid of. Sputum is best collected in a vessel containing some germicide fluid, and then thrown into the drains. Where there is no drainage system, it should be burnt or buried deep in the ground. A good form of vessel is one made of metal with a detachable lid, so that the whole can be boiled.

A sputum mug of this pattern (Braby's "Eclipse" Sputum Mug) can be bought from any chemist at a cost of 3s. Carbolic acid (1 in 20), or Jeye's fluid, are good germicide solutions. For patients who are up and about, the collection of sputum is not quite such a simple matter. The best plan is to carry a pocket sputum flask. It is certainly the duty of every consumptive to do so. Many patients object to using a sputum flask when away from the sanatorium. The public are rather frightened of consumptives, and the use of a sputum flask is apt to draw undesirable attention. With a little care, however, a sputum flask can be used, without the fact being at all noticeable. A good pattern of sputum flask, made of aluminium, and thus not easily broken, may be bought from Allen and Hanbury's at a cost of 4s. 6d. For the poorer classes a wide-mouthed bottle, with a thick rubber stopper, as suggested by Newsholme, is quite sufficient. All vessels, pocket-flasks, &c., used for the collection of sputum, should be thoroughly washed in boiling water daily. An alternative plan is to use small bits of cloth or Japanese paper handkerchiefs. These should be carried in one pocket, or in one compartment of a small waterproof bag. In the other compartment or pocket should be fitted a rubber

lining. As the cloths or paper are soiled, they should be placed in the rubber-lined receptacle until the patient reaches home, when they should be at once burned. The rubber lining should then be removed, cleansed, and disinfected. Patients should on no account spit into their pocket-handkerchiefs. If a handkerchief is inadvertently used, it should be put into boiling water, to which some washing-soda has been added, or into some disinfectant fluid, such as carbolic. This should always be done before the sputum has become dry. Handkerchiefs, veils, &c., which may have come into contact with sputum, should be treated in a similar way; soiled handkerchiefs should never be put under a pillow at night.

TABLE NAPKINS

These may become infected with bacilli by the patient wiping his mouth. Care should be taken that his napkin does not come into contact with those of other people. The best plan is for the consumptive to use Japanese paper napkins; these should be burnt after each meal.

In the case of bedridden patients, particular care must be taken in the collection of sputum. Rags, handkerchiefs, &c., used for wiping the mouth must

be burnt as soon as possible. Sputum should on no account be swallowed; for by habitually doing so there is great risk of infecting the intestines with tuberculosis. A patient need not be alarmed, however, if inadvertently on some one occasion he may have swallowed some sputum.

Crockery and cutlery used by consumptives should be thoroughly washed in boiling water containing some washing-soda.

DISINFECTION OF ROOMS

The points to be aimed at by a consumptive with regard to his rooms are good ventilation, plenty of air and sunlight, and freedom from dust. His rooms should be kept scrupulously clean. To this end, they should be furnished on very simple lines. The carpets should be replaced by polished wood floors, linoleum, or cork carpet; carpet strips or rugs can be laid on this flooring. The floor should be washed every day, and the rugs or carpet strips taken out of doors and beaten. The furniture should be simple in make and easily washed with soap and water. Curtains and hangings of any sort should be reduced to a minimum, and those that are retained should be frequently cleansed or changed. Walls are best dis-

tempered or covered with washable paint or wall-paper. The rooms should never be dry-swept. Moist tea-leaves should be used when sweeping is done. When dusting, always use a damp cloth, and thoroughly wash it after use. Never flick off the dust from furniture, &c., with a dry duster. Periodically, the room should be more thoroughly cleansed and disinfected. This should always be done in the case of the death or removal of a patient before his rooms are again occupied. To quote from Newsholme ("The Prevention of Tuberculosis," p. 327): "The walls should be periodically cleansed, especially the part between the floor-level and about a yard above the level of the bed. Four methods of cleansing and disinfection are commonly adopted; the help of the officials of the sanitary authorities can be obtained in carrying out one of these.

"(a) The wall-paper, if dirty, should be stripped off and burnt.

"(b) A solution of chlorinated soda (1 or 2 per cent.) may be brushed on the walls.

"(c) Formalin spray (1 in 50) may be employed.

"(d) The German method of rubbing down the walls with bread crumbs and then burning the crumbs may be adopted.

“The ceilings should be whitewashed every six months.

“For thorough disinfection, bedding, carpets, curtains, wearing apparel, and all similar articles belonging to or used by the patient, which cannot be thoroughly washed, should be disinfected in an efficient steam disinfector.”

RISK OF INFECTION

Consumption must certainly be regarded as an infectious disease, inasmuch as a patient suffering from this form of tuberculosis can communicate the disease to other people. Infection, as already stated, is brought about by the tubercle bacilli coughed up by the consumptive. The chief source of infection is the inhalation of confined and impure air, which has been contaminated by the sputa of consumptives. It should follow then, that if the patient collects and destroys all his sputum, he ceases to be a source of infection. This is fortunately the case, at least to a very large extent. The consumptive living under favourable hygienic conditions, who has been educated and is faithful to his education, is not a focus of danger to his neighbours. Under opposite conditions he is infectious in a very

high degree. As Newsholme has stated: "There can be little difficulty in agreeing that the home treatment of advanced consumptives in crowded dwellings in which the necessary precautions cannot be taken is a predominant cause of the continued spread of tuberculosis." With the utmost care, as to the disposal of sputum, there remains a possible danger of spreading infection. This danger consists in the tubercle bacilli which are carried in the droplets or spray which often accompany a cough. A handkerchief should always be held before the mouth when coughing. To render themselves as safe as possible against infection, those who live with consumptives should keep in good health. They should adopt the principles of cure followed by the patient, to the extent of abundance of fresh air, good food, freedom from over-exertion, &c. Healthy individuals living on these lines, if they inhale tubercle bacilli, will stand every chance of destroying the germs and thus escaping infection. Conversely, any one run down or overworked, and living continually in close contact with a consumptive in ill-ventilated rooms, runs the gravest risk of contracting the disease. The best way, in short, of escaping consumption, is to live as if trying to cure it. There are then these two factors in relation to infection:

- (1) The infective agent, the tubercle bacilli, and
- (2) The proneness or otherwise to infection of the individual who takes the bacilli into his system.

Continued close contact with a consumptive should be avoided. The patient should certainly sleep in a bed by himself, and for preference should have his own bedroom. There is very little risk to a healthy person who shares a bedroom with a consumptive if the individuals have separate beds, and the room is clean and airy. Children should under no circumstances share a bedroom with a patient. Caressing and kissing obviously represent close contact. The constant caressing of children by a consumptive parent is certainly to be avoided. In my lectures I usually illustrate these principles by a reference to a personal experience. For some years I shared a sleeping chalet with a friend who was suffering from somewhat advanced consumption. The chalet, open on three sides, was placed in the garden; our beds were about a yard apart. My day was spent for the most part in the open air, and my life generally was a healthy one. I never felt the least fear of becoming infected under these conditions of close contact. At the same time I should have absolutely declined to work day by day at the same desk with this patient in a stuffy city office.

To summarise : there is little danger of living with a consumptive so long as we maintain our own health by sufficient exercise, fresh air, and wholesome food, and so long as the consumptive collects and destroys his sputum, and his rooms are kept clean and well ventilated. By living in a regular and hygienic manner, we raise our resisting power, or, as it is termed, our degree of immunity to the disease.

PREVENTION

How to avoid catching the disease, if presumably liable to it.

Much that has already been said apropos of risk of infection serves as an answer to this query. Avoid if possible a confining and sedentary occupation. Live a regular life, take proper meals, and regular exercise. Avoid fatigue and any form of excess. Sleep with an open window. Be particularly careful of a cold or influenza. Keep an eye on your weight. Steady loss of weight, a cough which will not go, and unwonted fatigue after the day's work are warnings which demand attention.

Infection through milk. Milk from cows which are suffering from tuberculosis may cause the disease.

Children especially are often infected in this way. It is safest to boil all milk before use.

CONCLUSION

To some readers the advice that I have given may seem to involve much troublesome care and self-sacrifice. But they must remember that the consumptive is engaged in a prolonged struggle with a perilous disease. The surgeon cannot help him, and there is little scope for the physician's medicine. Ultimate cure depends mainly on himself. Good food, fresh air, rest, and suitable recreations—these are the simple but powerful remedies. The patient who habitually neglects them will pay the inevitable penalty, but should they be made use of intelligently, he may face the future with hopefulness and a reasonable measure of confidence. The minority only may achieve complete success, that is, cure; but the majority may with certainty expect a prolongation both of life and of capacity for work and enjoyment.

INDEX

- ABSOLUTE CURE, 8
Alberta, 95
Alcohol, use of, 47
America, North, 100
 South, 103
Apparent cure, 8
Australia, New South Wales,
 124, 128
- BACILLI, 8, 136
 action of, 1
Bates, Mr. Stanley, 28
Bathing, 52, 60
Beans, 45
Bed-clothing, 60
Bedroom, best type of, 30
 windows, 30
Billiards, 57
Bone joints, tuberculosis of, 2
Bowls, 55
Breakfast, 38, 41, 43
Breathing exercises, 55
British Columbia, 92
Buenos Aires, 103
Butter, 44
- CALIFORNIA, 100, 102
Canada, Alberta, 95
Canada, British Columbia, 92
 North-West, 96
Card games, 56
Care of teeth, 60
Chalet, 20
Change of air, 31
Character, influence of, 74
Cheese, 45
Chess, 56
Clothes, materials for, 59
Clothing, 58
Conclusion, 140
Consumption, its nature, 1, 6
Cost of food, 44, 45, 46
Cricket, 51
Croquet, 55
Cure, 9
 absolute, 8
 apparent, 8
 process of, 4, 6
Curling, 54
Cycling, 52
- DAIRY-FARMING, 80
Dancing, 57
Diagnosis of tuberculosis, 6
Diet, 37, 38, 72
 fluid, 73

- Diet, for dyspeptics, 69
 for invalids, 71, 72
 Dinner, 38, 43
 Disinfection, 131, 135
 Disposal of sputum, 131
 Dominoes, 56
 Draughts, 17
 Dyspepsia, 69
- EGGS, 45
 Emigration, 89
 Exercise, 48, 50
- FARMING, 78, 79, 92, 96, 97, 99,
 100, 104, 107, 113, 116, 118,
 120, 122, 125, 128, 130
 Fish, 45
 Fishing, 53
 Fluid diet, 73
 Fog, 19
 Food, 36, 69
 cost of, 44, 45, 46
 Football, 51
 French gardening, 84
 Fresh air, 11, 12, 14
 Fruit-growing, 78, 85
 Furniture of shelter, 25
- GARDENING, 19, 55, 81, 84
 Glands, tuberculosis of, 2
 Golf, 54
- HÆMOPHYSES, 71
 Health resorts, 32
 Hæmorrhage, 70
- Hockey, 51
 House, suitable site for, 16
 Hunting, 53
- INDIGESTION, 69
 Indoor occupations, 86
 recreations, 56
 Infection, 131
 prevention of, 139
 resistance to, 2
 risk of, 136
 through milk, 140
 Illness, 71
 Influence of character, 74
 Influenza, 71
 Invalid diet, 71
- KING EDWARD VII. SANATO-
 RIUM, 66
- LARYNX, tuberculosis of, 71
 Lawn tennis, 53
 Lentils, 45
 Luach, 41
- MATERIALS for clothes, 59
 Meat, 44
 Medical examination, 62
 Milk, 44
 infection through, 140
 Motoring, 55
 Muscular exercises, 56
 Music, 57
- NAPKINS, table, 133
 Natal, 113, 118

- Nature of Consumption, 1, 6
 New South Wales, 124, 128
 New Zealand, 120, 122
 Night air, 17
 North-West Canada, 96
- OATMEAL, 45
 Occupation, 77
 indoor, 86
 Open windows, 18
 Orange River Colony, 106
- PEAS, 45
 Pottenger, 6
 Potatoes, 45
 Porridge, 46
 Poultry-rearing, 78, 80, 85
 Prevention of infection, 139
 Principles of sanatorium *régime*, 11
 Process of cure, 4, 6
- RECREATIONS, 48, 50
 Relapse, 4, 5, 7
 signs of, 67
 Resistance to infection, 2
 Rest, 48
 Revolving shelters, 20
 Riding, 53
 Risk of infection, 136
 Rowing, 52
- SAILING, 52
 Sanatorium *régime*, principles
 of, 11
 routine, 66
 Sea-bathing, 52
 Sea voyages, 33, 35
 Shelters, 20, 26
 Shelter furniture, 25
 Shooting, 53
 Signs of relapse, 67
 Singing, 57
 Site for house, 16
 Skating, 54
 Ski-ing, 54
 Sleeping shelter, 26
 Smoking, 56
 Soup, 46
 South Africa, Natal, 113, 118
 Orange River Colony, 106
 Transvaal, 116
 Sputum, disposal of, 131
 flask, 132
 Supper, 39, 43
- TABLE napkins, 133
 Tea, 39, 42, 43
 Teeth, cure of, 60, 70
 Temperament, influence of, 74
 Temperature, 64
 taking, 63
 Tents, 27
 Time required to arrest disease,
 3, 10
 Transvaal, 116
 Tubercle bacilli, action of, 1
 Tuberculosis, diagnosis of, 6
 of bone-joints, 2
 of glands, 2
 of larynx, 71
- UNITED STATES OF AMERICA
 100
 California, 100, 102

- VOICE, loss of, 71
Voyages, 33, 35
- WAKING temperature, 65
Walking, 50
Weight, increase in, 37, 63
- Where to live, 12
Williams, Dr., on sea voyages,
35
Window, bedroom, 30
open, 18
Winter sports, 51



It's not
how much
you eat,
but what you
eat that makes
you strong

It's not even how much you digest—for there are many foods that are easily digestible, yet which lack the proteid that is the real life element of food.

Over fifteen per cent. of Quaker Oats is pure proteid.

Three times as nourishing as meat. Science proves it. You prove it for yourself!



Cook as directed on packet.
40 PLATEFULS
COST SIXPENCE

HOME NURSING AND HYGIENE

BY

FLORANCE HUFTON-WINDUST

*Late Senior Lecturer on Home Nursing, etc., for the Surrey County Council;
and Hospital Sister and Superintendent of Nurses*

Crown 8vo. Price 1/- net. Limp Cloth

(By Post, price 1s. 3d.)

SOME PRESS OPINIONS.

"One of the most practical books of the kind we remember to have seen."—*Literary World*.

"The amount of information and sound advice given is extraordinary."—*Sheffield Independent*.

"The book fulfils a decidedly useful purpose."—*The Lancet*.

"Should prove a very useful manual for those who have the care of invalids."—*General Practitioner*.

Published by ADAM & CHARLES BLACK, 4 Soho Square, London, W.

THE NURSE'S HANDBOOK OF COOKERY

A Help in Sickness and Convalescence

BY

E. M. WORSNOP AND M. C. BLAIR

Second Edition. Crown 8vo. Cloth. Price 1/6

SOME PRESS OPINIONS.

"It would be difficult to praise too highly this excellent book, which will indeed be 'a help in sickness and convalescence,' not only to the trained nurse, but also in every household."—*Hospital*.

"Is written so lucidly that anyone with an elementary knowledge of the subject can work from it. The chapter on **Peptonized Food** is most valuable."—*Nursing Notes*.

"A useful little manual of invalid cookery . . . Especially valuable will be found the chapters dealing with the differing nutritive properties of the various foods."—*Black and White*.

Published by ADAM & CHARLES BLACK, 4 Soho Square, London, W.



HORLICK'S

MALTED MILK (In Powder)
Form.



The Ideal Food for all ages.

SUSTAINS—NOURISHES—BUILDS UP

HORLICK'S is a well-balanced and self-contained food of the highest possible form of nourishment—is easily digested and quickly assimilated—strengthens and builds up the weak. Can be taken hot or cold.

HORLICK'S stands pre-eminent in its power of enabling the system to resist disease and in building up and strengthening the constitution.

KEEPS IN ANY CLIMATE—ALWAYS SWEET AND PURE

Packed in 1/6, 2/6, & 11/- Bottles of all Chemists and Stores

Samples—

HORLICK'S MALTED MILK CO., Slough, Bucks, England

WINCARNIS

For the Weak & Ailing

A Nursing Journal says:—“The most delicate and sensitive stomach accepts WINCARNIS agreeably, being assimilated at once; quickly yet surely repairing the ravages of a painful illness by creating pure healthy blood—the vitalising stream of invigoration—that braces up the nerves, feeds the tissues and restores health—thus the problem of nutrition is solved.”

Gold Medal Franco-British Exhibition, London, 1908.

By Royal Appointment to the King and Queen of Spain.

Supplied to the Royal Army Medical Corps.

Supplied to His Majesty's Forces.

Supplied to both Houses of Parliament.

FREE

Trial bottle will be sent on receipt of 3d. to cover carriage. Address—**COLEMAN & CO. Ltd.**
356 Wincarnis Works, Norwich.

ADVERTISEMENTS

THE OPEN AIR SHELTER CO.—*Makers of*

The "Stanley Bates" GARDEN SLEEPING SHELTER

Designed by Mr. Stanley Bates, the author of "Open-air at Home: Sanatorium Treatment Continued" (John Wright, Bristol, 2s. 6d. net), from personal and successful experience of Home Treatment for Consumption.

The Lancet (March 5, 1910):—"A Shelter . . . , as near perfection as is possible in this world."

Shelter No. 1. size 9 ft. by 7 ft. 9 in., **£15 10s.** Carriage Paid to any station in England and Wales. For Scotland or Ireland, add 5%.

Illustrated list, with other sizes, free on application to the

OPEN AIR SHELTER COMPANY

140 North End, Croydon.

Specialists in Portable Buildings for the open-air treatment. Sanatorium buildings erected. Estimates free.

BLACK'S GUIDES TO HEALTH AND HOLIDAY RESORTS

- | | |
|--|--|
| <p>Bath and Bristol. 6d. net
 Belfast and the North of Ireland. 1s. net
 Bournemouth. 6d. net
 Brighton and Environs. 6d. net
 Buckinghamshire. 1s. net
 Buxton and the Peak Country. 1s. net
 Canterbury and East Kent. 1s. net
 Channel Islands. 1s. net
 <i>Cloth, with extra Maps, 2s. 6d. net</i>
 Cornwall and Scilly Islands. 2s. 6d. net
 Derbyshire. 2s. 6d. net
 Devonshire. 2s. 6d. net
 Dorsetshire. 2s. 6d. net
 Dublin and the East of Ireland. 1s. net
 Edinburgh. 6d. net
 English Lakes. 3s. 6d. net
 English Lakes. Cheap Edition, 1s. net
 Exeter and East Devon. 1s. net
 Galway and West of Ireland. 1s. net
 Glasgow and the Clyde. 6d. net
 Guernsey, Herm, Sark and Alderney. 6d. net
 Hampshire. 2s. 6d. net
 Ilfracombe and North Devon. 6d. net
 Ireland. 5s. net
 Ireland. Cheap Edition, 1s. net
 Isle of Man. 1s. net
 Isle of Wight. 1s. net
 Jersey. 6d. net
 Kent. 2s. 6d. net
 Kent, East (Canterbury, Margate, Ramsgate, etc.). 1s. net
 Kent, West (Tunbridge Wells, Maidstone, etc.). 1s. net</p> | <p>Killarney and the South of Ireland. 1s. net
 Leamington, Stratford, etc. 1s. net
 Liverpool and District. 1s. net
 London and Environs. 1s. net
 Around London, Complete. 2s. 6d. net
 Around London, North. 6d. net
 Around London, West. 6d. net
 Around London, South. 6d. net
 Manchester and Salford. 1s. net
 Margate and the East of Kent. 1s. net
 Matlock (Dovedale and Central Derbyshire). 1s. net
 Moffat. 1s. net
 Plymouth and South Devon. 1s. net
 Scotland. 7s. 6d. net
 Scotland. Cheap Edition, 1s. net
 Scotland, East Central. 2s. 6d. net
 Scotland, North. 2s. 6d. net
 Scotland, West and South-West. 2s. 6d. net
 Scotland, South-East. 2s. 6d. net
 Sherwood Forest and the Dnkeries. 6d. net
 Somerset. 2s. 6d. net
 Surrey. 2s. 6d. net
 Sussex. 2s. 6d. net
 Torquay and the South Hams. 6d. net
 Trossachs and Loch Lomond. 1s. net
 Tunbridge Wells and West Kent. 1s. net
 Wales, North. 3s. 6d. net
 Wales, South. 3s. 6d. net
 Wales. Cheap Edition, 1s. net
 What to See in England. Illus. 2s. 6d. net
 Wye, The. 1s. net</p> |
|--|--|

Published by ADAM & CHARLES BLACK, 4 SOHO SQUARE, LONDON, W.

